ALBERTA

MINES BRANCH

REPORTS

1918-20

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ANNUAL REPORT

OF

THE MINES BRANCH

OF THE

PROVINCE OF ALBERTA

1918

PRINTED BY ORDER OF THE LEGISLATIVE ASSEMBLY



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L. C. Charlesworth, Esq.,

Deputy Minister of Public Works,

Edmonton, Alberta.

Sir,—In accordance with the provisions of The Mines Act, I herewith submit my report of the Mines Branch for the year ending December 31, 1918.

The Mines Act, which became effective on August 1, 1913, was amended at the 1918 Session of the Legislature, the principal changes made being provisions for bringing all operations, incidental to the extraction of coal by removing the over-lying strata, within the scope of the Act, and for requiring monthly reports with reference to output, etc., to be made to the Minister, instead of yearly reports as formerly. The Act was also amended to give the Lieutenant Governor in Council power to grant leases for mining coal under road allowances, to make arrangements for the installation and operation of mine rescue stations, and to make regulations regarding wash-houses and emergency hospitals.

The list of permitted explosives was amended on November 5, 1918, so that this list contains now only the explosives known as Monobel No. 1, Polar Permitte, Viking No. 1, and Dynobel No. 2.

The most serious accident which occurred during the year was at the mine operated by the Oliphant-Munson Collieries, Ltd., near Coalspur, in which a building containing a small amount of powder was destroyed by fire, with the result that the powder exploded, killing the manager and blacksmith, and injuring four men seriously and eleven slightly. A fire also occurred during December, 1918, at Cardiff, by which the office of the Cardiff Collieries, Ltd., was completely destroyed. No satisfactory explanation could be obtained as to the causes of these fires.

During the year underground fires occurred at the mines operated by the Cardiff Collieries, Ltd., the Lakeside Coals, Ltd., the Humberstone Coal Company, Ltd., and the Franco-Canadian Collieries, Ltd. The fire at the mine operated by the Cardiff Collieries, Limited, has been in existence for several years, and it was thought that it had been successfully cut off from the workings, but during the month of August it found its way through several barrier pillars, the result being that the management was forced to abandon that portion of the mine. The fire which occurred at the mine operated by the Lakeside Coals, Limited, took place during the month of May in an abandoned portion of the mine. These workings were afterwards sealed off by stoppings and water pumped into this area by an electrically driven pump, but the fire has not yet been extinguished. It would appear that the fire which broke out in the mine operated by the Humberstone Coal Co., Ltd., near Clover Bar, had been caused by coal burning on the outcrop of the seam on the banks of the North Saskatchewan river several years previously. The area in which this

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fire occurred was sealed off by clay stoppings which were later reinforced by brick and cement. During the month of April an explosion occurred in the mine operated by the Franco-Canadian Collieries, Ltd., by which two men were slightly burned about the face and hands. This explosion, as far as could be ascertained, was caused by gas coming in contact with a fire which had been burning for several years in the upper portion of the mine, and which had been sealed off. The pillars surroundinig the area where the fire was burning, caved, with the result that the gas became ignited. This mine is now abandoned.

An explosion of gas took place during the year in the mine operated by the Canmore Coal Co., Ltd., by which five men were more or less injured. This explosion was the result of insufficient inspection of the place where the shot was about to be fired. The effects of the explosion was felt for approximately 200 feet from the point of ignition, but the dust present did not show any signs of coking. Another explosion of gas occurred in the No. 3 mine operated by the Department of Natural Resources of the Canadian Pacific Railway Company at Lethbridge, by which a small quantity of gas, which accumulated in a cavity in the roof, was ignited.

During the year twenty-two persons lost their lives from accidents as compared with twenty-four during the year 1917. Of these fatal accidents, three occurred above ground and nineteen below ground. Sixteen persons were seriously injured above ground and forty-four below ground, and twenty-one persons were slightly injured above ground and fifty-six below ground.

In addition to the inspections which have been made, from time to time, of the different mines by the District Inspectors, all fatal and serious accidents have been investigated and all inquests attended.

Samples of mine air have been taken throughout the year by the District Inspectors, in addition to tests made by them, with the Burrell Gas Detector. These samples have been forwarded to the Department of Mines, Ottawa, and to the University of Alberta for analysis.

2,881 safety lamps of the Wolfe type, 35 of the Koehler type, 13 of the Marsaut type, 1,960 electric portable lamps of the Edison type, 600 of the Wico type and 50 of the Ceag type are in use. It will be noted that a considerable increase has taken place in the number of electric safety lamps in use, compared with previous years.

Training in connection with Mine Rescue work has been carried on satisfactorily throughout the year, there being three mine rescue cars and six stations at present in operation. Several appointments were made to fill vacancies caused by the resignations of Superintendents, and in every case a returned soldier received the appointment. When these appointments are made, due consideration is given to a man's efficiency and experience in mining, and in all cases these positions are being satisfactorily filled. On July 1, 1918, a competition in Mine Rescue and First Aid Work was held under the auspices of the Rocky Mountain Branch of the Canadian Mining Institute, at Lethbridge. Fuller particulars of this competition are given in the report under the heading of Mine Rescue Work.

There were 317 coal mines, two copper ore and two shale mines in operation during the year, seventy of which were opened, nine reopened and seventy-one abandoned. The mines in the Peace River District which were opened in 1916 have been abandoned, and no coal was produced in that district during the past year.

The total output of coal for the year 1918 was 6,148,620 tons, exceeding that for the year 1917 by 1,285,206 tons. The largest monthly production was during the month of January, when 646,368 tons were produced. Alberta is now in the position, for the first time, of being the largest coal-producing Province in Canada, 40.54 per cent. of the whole output of the Dominion being produced in Alberta.

Nine persons were prosecuted for contravention of The Mines Act during the year, convictions being obtained in each case.

Several changes in the staff of inspectors took place during the year. Mr. James Crowder, formerly manager of the Drumheller Land Co., Ltd., at Drumheller, was appointed District Inspector of Mines, succeeding Mr. William Stevenson, who took the position of General Manager of the Hillcrest Collieries, Ltd., at Hillcrest. Mr. Robert J. Lee, formerly manager of the Rock Springs Coal & Brick Co., Ltd., at Elean, was appointed District Inspector of Mines for the Edmonton District, this being an additional appointment.

Mr. John W. Hooks was appointed superintendent of Mine Rescue Car No. 3, and Mr. Edward Royle, superintendent of Mine Rescue Car No. 1.

The number of persons employed in mines during December, 1918, was 10,209, being an increase of 397 over the number employed during December, 1917.

The question of widening the market for Alberta coal has received a great deal of attention during the past year, the result being that the amount of coal produced during 1918 exceeded the amount produced during 1917 by 26.42 per cent. On April 29, 1918, I was appointed Fuel Administrator by the Provincial Government to assist Mr. C. A. Magrath, Fuel Controller for the Dominion of Canada. A considerable amount of advertising was done through newspapers and other publications, and in addition a film, 1400 feet in length, showing the different mining operations, was produced, and is at present being shown in different theatres in the Province of Manitoba. Unfortunately the cost of production and freight rates have increased during the last two years to such an extent that it is difficult for Alberta coal to compete satisfactorily against American coal in the Manitoba and Saskatchewan markets. The average cost of production for labor alone, during the twelve months ending May 31, 1918, was \$2.07 per ton for domestic run of mine coal and \$2.01 per ton for steam run of mine coal as compared with \$2.36 per ton for domestic coal and \$2.18 per ton for steam coal for the six months ending December 31, 1918. In addition to this the cost of material has also increased to a great extent.

Although the amount of coal produced during 1918 was considerably in excess of that produced during 1917, this amount only represents approximately 50 per cent of the possible production in the Province with the present development, and if anything is to be done to obtain the Manitoba market by having a decreased cost of produc-

tion, the first thing to consider is the question of regulating the production in such a way that the coal mines in operation should produce at least 80 per cent of what they are capable of doing. It is also important that only the best grades of coal which we can produce in the Province are shipped into the markets where Alberta coal has to compete with imported coal, and this can only be done by instituting a system of zoning such as has been done in the United States during the last two years. The procedure would, of course, be harmful to the mines producing low grades of fuel, inasmuch as their market would be restricted, but it would undoubtedly be to the benefit of the Province as a whole.

The payroll for labor, at mines alone, during the year 1918, was approximately \$14,000,000, so that it will readily be seen the important part which the mining industry will take in the Province if it is conducted along proper lines.

From figures supplied by the Federal Government, there is a market available for Alberta coal of approximately nine million tons per year, and at least fifty per cent of this market can only be obtained if all coal is properly prepared, and only that of the best quality is sold in the territory into which American coal is shipped.

The following tables show the quantities in tons of coal entered for consumption during the years 1916, 1917 and 1918 through ports in the Provinces of Manitoba, Saskatchewan and Alberta, and including the ports of Fort Frances, Fort William and Port Arthur.

BITUMINOUS.

	1916	1917	1918
January	247.584	289,379	
February	237,246	116,267	
March	135,393	154,640	
April	62,926	79,851	
May	110.671	143,116	
June	239,703	161,843	
July	282,696	300,690	
August	254,586	368,285	
September	236,111	233,043	
October	210.622		
November	194,017		
December	165,379		
Total	2,376,934	1,847,094	2,240,447

ANTHRACITE.

	1916	1917	1918
January	4,075	3,278	
February	16.665	5.333	
March	2,995	2.842	
April	443	⁷⁸	
May	20,306	51,863	
June	83,157	89,056	
July	123,281	89,665	
August	81,176	65,231	
September	78,636	59,041	
October	50,816		
November	40,410		
December	31,682		
Total	533,642	366,387	318,594

The figures showing importation for the year 1917 are for nine months ending September 30, no figures being available for the last three months of the year.

No figures are available showing the amount of coal imported by months during the year 1918.

ANNUAL CONSUMPTION OF COAL IN CANADA.

Calendar	Canadia	ın	Imported		Total	Per
Year	Short Tons	%	Short Tons	%	10001	Capita
1905	7,032,661	48.9	7,343,880	 51.1	14,376,541	2.362
1906	7,927,560	51.7	7,398,906	48.3	15,326,466	2.425
1907	8,617,352	45.0	10,549,503	55.0	19.166.855	2.947
1908	9.156,478	47.3	10.195.424	52.7	19.351.902	2.820
1909	8.913.376	47.9	9.711.826	52.1	18,625,202	2.682
1910	10,532,103	50.2	10,438,123	49.8	20,970,226	2.960
1911	9,822,749	40.5	14,424,949	59.5	24,247,698	3.384
1912	12,385,696	46.0	14,549,104	54.0	26,934,800	3.596
1913	13,450,158	42.6	18,132,387	57.4	31,582,545	4.071
1914	12,214,403	45.5	14,637,920	54.5	26,852,323	3.325
1915	11,500,480	48.1	12,406,212	51.9	23,906,692	
1916	12.348.036	41.3	17,517,820	58.7	29,865,856	
1917	14.046,759	40.2	20,857,460	59.8	34,904,219	
1918	15,180,000	40.8	22,057,065	59.2	37,237,065	

American coal shipped into Canada, by Provinces East and West, for the Year ending December 31, 1918:

East	Anthracite	Bituminous	Total
Ontario	2,842,970	10,994,289	13,837,259
Quebec	1.500,669	4.033.618	5,534,287
Nova Scotia	43,792	1,097	44,889
New Brunswick	71,450	5,035	76,485
Prince Edward Island	5,104		5,104
Total (tons)	4,463,985	15,034,039	19,498,024

West	Anthracite	Bituminous	Total
Fort William	249,910	1,562,314	1,812,224
Port Arthur	65,594	643,728	709,322
Manitoba	2,827	28,234	31,061
Saskatchewan	37	419	456
Alberta		913	913
British Columbia	226	4.784	5,010
Yukon		55	55
Total (tons)	318,594	2,240,447	2,559,041

Total amount imported into Canada, for year ending December 31, 1918:

	Western Canada	·Eastern Canada	Total
Anthracite and Bituminous (tons)	2,559,041	19,498,024	22,057,065

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SUMMARY OF STATISTICS.

Number of short tons of coal produced	6.148,620
Number of short tons of briquettes produced	
Number of short tons of coke produced	
Number of short tons of shale produced for making bricks	9,898
Number of short tons of bricks sold	7.687
Number of coal mines in operation	. 317
Number of copper ore mines in operation	. 2
Number of shale mines in operation	. 2
Number of mines opened	. 70
Number of mines re-opened	. 9
Number of mines abandoned	. 71
Average number of persons employed above ground	2,633
Average number of persons employed below ground	6,141
Number of separate accidents causing loss of life	. 21
Number of deaths caused by accidents above ground	
Number of deaths caused by accidents below ground	
Number of serious accidents above ground	
Number of serious accidents below ground	
Number of slight accidents above ground	
Number of slight accidents below ground	
Number of persons prosecuted under The Mines Act	
Number of Provisional Overmen's Certificates issued during 1918	
Number of Third Class Certificates issued during 1918	
Number of Second Class Certificates issued during 1918	
Number of First Class Certificates issued during 1918	
Number of Mine Surveyors' Certificates issued during 1918	
Number of Mine Rescue Certificates issued during 1918	
Total number of Third Class Certificates issued to date	
Total number of Second Class Certificates issued to date	
Total number of First Class Certificates issued to date	
Total number of Mine Surveyors' Certificates issued to date	
Total number of Mine Rescue Certificates issued to date	448

In the following tables the short ton of 2,000 lbs. is used in all cases.

		Output in tons	_
		for N.W.T.	Output
Year		Alberta	in tons
	8	and Saskatchewan	Alberta
1901		. 346,649	
1902		. 510.674	
1903		622,939	
1904			
1905			811,228
1906			1,385,000
1907			1,834,745
1908			1,845,000
1909			2,174,329
1910			3,036,757
1911			1,694,564
1912			3,446,349
1913			4,306,346
1914			3,821,739
1915			3,434,891
1916			4,648,604
1917			4,863,414
1918		<u>-</u> -	6.148.620

CLASSIFICATION OF OUTPUTS DURING THE YEARS 1901 TO 1918 INCLUSIVE.

Year	Domestic	Domestic and Bitumin- ous	Bituminous	Anthracite	Coal Used in Coke Production	Briquettes	Coke
*1901		331,907		14,742			
*1902		494,087		16,587			
*1903		617,754		5,185			
*1904		759,568		23,363			
1905]	972,686		43,653	71,292		46,640
1906	602,780		546,623	235,597	103,936		69,844
1907	639,335		939,295	256,115	112,887	49,585	73,782
1908	584,334		1,011,571	249,095	128,397	36,261	75,657
1909	763,673		1,197,399	213,257	148,104	89,785	87,812
1910	878,011		1,896,961	261,785	196,249	108,996	121,578
1911	964,700		649,745	80,119	61,591	48,200	35,984
1912	1,341,389		1,926,371	178,589	170,818	90,000	105,684
1913	1,763,225		2,374,401	168,720	104,012	130,861	65,167
1914	1,697,401	~	1,953,367	170,971	44,249	109,082	29,058
1915	1,682,922		1,626,237	125,732	38,878	83,180	23,826
1916	2,172,801		2,335,259	140,544	67,105	107,959	41,950
1917	2,537,829		2,206,868	118,717	51,905	93,818	31,630
1918	3,035,061		2,982,334	131,225	53,462	100,470	32,858

^{*}Includes outputs from Alberta and Saskatchewan.

During the year 1909 a strike affecting all the larger mines in the Province lasted for a period of three months.

During the year 1911 a strike affecting all the larger mines in the Province lasted for a period of eight months.

During the year 1917 a strike affecting all the larger mines in the Province lasted for a period of three months.

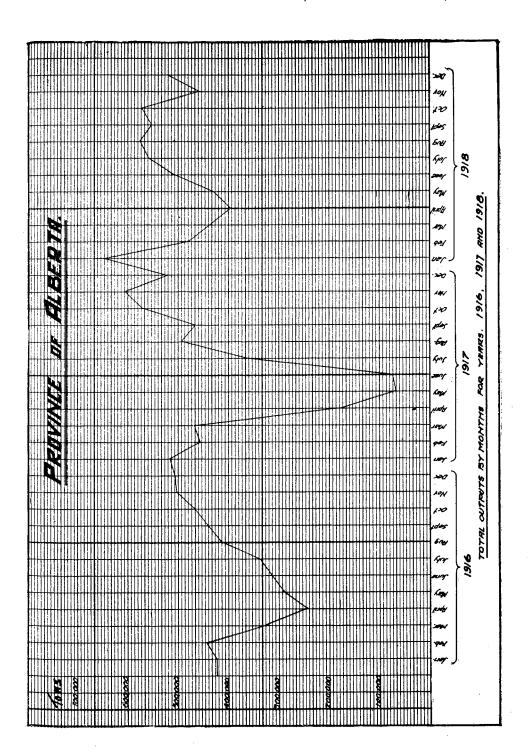
The following table shows the outputs of the different districts for the years 1917 and 1918:

		1917			1918	
DISTRICTS	Domestic	Bitu- minous	Anthra- cite	Domestic	Bitu- minous	Anthra- cite
Crow's Nest Pass		1,193,313	3		1,601,486	
Pincher Creek	6,804			3,955		
Lethbridge	619,850	1		857,092		
Magrath	. 1,011	Í	.(1,627	1	1
Milk River	9,140	\	.[1	
Taber	175,666	·	.	183,485	1	
Bow Island	6,846	1	.	7,283	1	
Medicine Hat	14,846			19,028		
Aldersyde	7,339			8,069		
High River	1,096			570		
Canmore	1	196,233	1	11	274,709	
Banff	Í		118.717	((131.225
Drumheller	660,974	(881,081	Í	
Big Valley	29,897				[
Brazeau		266,897			371.562	
Brooks	8,283	l		9.783		
Hanna		}				
Lacombe	18,223	}		15,201		
Trochu	14.134			18.248		
Three Hills	24,874					
Carbon	4.615					
Battle River	10,544		[
Camrose	61,293		`			
Tofield	71,510					
Clover Bar	263,857					
Edmonton	120,519		1 1			
Namao						
Cardiff	257,459					
Wabamun						
Pembina			1	109,429		_
Jasper Park						
Yellowhead Pass		146,949				
Mountain Park		153,397				
Peace River						
Total	2,537,829	2,206,868	118,717	3,035,061	2,982,334	131,225

The following table indicates how the total outputs of COAL, BRIQUETTES and COKE were disposed of:

	Waste (includ- Heap ing slack)	129,577 3,035,061 15,431 2,982,334 16,147 131,225	161,155 6,148,620	In Stock 787 100,470 197 32,858
Lifted	from	3,802 8,778 327	12,907	
	Under Colliery Boilers	194,148 109,668 28,837	332,653	26
USED	Making Coke	53,462	53,462	
	Making Briqu- ettes	55,402	55,402	
	Total Sales	3,164 2,715,138 130,082 2,812,551 40 31,166	133,276 5,558,855	99,657
N	United States	3,154 130,082 40	133,276	102
SOLD FOR CONSUMPTION IN	Ontario	185	629	
CONSUM	Manitoba	387,728 120,132 3,308	511,168	7,710
LD FOR	Saskat- chewan	26,849 1,091,544 69,163 273,195 5,177 7,700	101,189 1,372,439	16,060
OS	British Columbia	26,849 69,163 5,177	}	4,368
	Alberta	1,205,419 2,219,794 14,941	3,440,154	71,519
		Domestic 1,205,410 Bituminous 2,219,79 Anthracite 14,94	Total3,440,154	BriquettesCoke

The bituminous coal shown in these tables as being sold for consumption in Alberta includes coal sold to railway companies for the use of locomotives, a considerable percentage of which was probably used in other Provinces.



The following table indicates how the total output of Donastic coal from the Province was disposed of:

m orang Sur House our		MOT SOM	מדור החמשו	ondono	OI TOUTING	Som com	י דוחווו מווכ ד	described from the property of	disposed of	
		SOLD	SOLD FOR CONSUMPTION	SUMPTION	1N		1.040,1	Used Under	1	
NAME OF DISTRICT	Alberta	British Columbia	Saskat- chewan	Manitoba	Ontarfo	United	Sales	Colliery Boilers	Slack put on Waste Heap	Total Ouput for Year (including slack)
Pincher Creek		_ ¦	31	180	1	55	3,949		9	3,955
Lethbridge	230,569	14,770	397,346	90,107	115	191	733,098	77,276	46,718	857,092
Magrath	1,582	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		-	1	100	1,582	1	45	1,627
Taber	0,538	9 109	- 25 879	04116	1.3	010	6,461 144,994	7.	380	6,848
Bow Island	6.806	_	0,0,00	01,1,0	76	010	144,324	20,557	18,824	183,489
Medicine Hat	5.371		9.667	1.677		1.524	18.239	21	892	19.028
Aldersyde	7,533	-	1		1 1		7,533		536	8.069
High River	260		!		1		999		10	526
Drumheller	158,344	3,825	448,071	204,161	172	511	815,084	41,773	24,224	881,081
Big Valley	32,984	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1,145		, , ,	34,129	580	6	34,718
Brooks	9,727	1		1	1 1 1 1 1 1 1	!	9,727	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	26	9,783
Hanna	28,186	1 1 1 1	1	1	1	!	28,186	288	759	29,533
Lacombe	13,399	1	789	124	1		14,312	113	922	15,201
Trochu	14,888	1 1 1	200	99			15,454	624	2.170	18.248
Three Hills	16,339	02	5,669	2,615	! ! ! ! !	1	24,693	1,848	3,609	30,150
Carbon					1	1	5,409	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	22	5,431
Battle River	11,555	1					11,555	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	648	12,203
Camrose	34,311	22	18,165	268	1 1 1 1	1	52,771	1,245	2,581	56,597
Tofield	50,338		10,829	3,628			64,795	1,021	238	66,054
Clover Bar	186,497	210	36,805	15,336		1 1 1	238,848	17,663	8,357	264,868
Edmonton	82,454		12,600	1,620	32		96,706	10,010	40	106.756
Namao	12,909	į		1,305	1	-	18,929	444	2.287	21,660
Cardiff	209.802			9.155		-	248,180	13.266	4.696	9.66.149
Wabamun	9,244	32	6.031	3,424	1		18.731	519		19,250
bina	43.144			21,747	-		95,077	6 813	7 539	109 489
Peace River		į	. !			-	10,00	0100	2001	37K,001
Total	[1.205.419]		26.849 1.091.544	387.728	444	154	2.715.138	194 148	125 775	3 035 061
						10160	001		616	100,000,0
And the second s										

The following table indicates how the total output of BITUMINOUS coal from the Province was disposed of:

Total Output	(including Slack)	1,601,486 274,709 371,562 283,342 195,972 255,263	2,982,334	l of:	Total Output	tor Year (including Slack)	131,225 100,479 32,858
Slack	pur on Waste Heap	3,221	6,585	sposed	-		
Lifted	from Stock	1,081	8,718	vere di		Slack Put to Stock	15,820 787 197
	Put to Stock	8,861	8,886	OKE v	USED	Under Colliery Boilers	28,837
USED	Under Colliery Boilers	60,651 15,408 5,991 5,259 12,229 10,130	109,668	and C	Ü		
	Making Coke	53,462	53,462	UETTES		Making Briquettes	55,402
Total	Sales	1,482,928 259,276 366,482 278,083 180,649 245,133	130,082 2,812,551	licates how the total outputs of ANTHRACITE, BRIQUETTES and COKE were disposed of:	£	Sales	31,166 99,657 32,661
	States United	130,082	130,082	HRACIT		United States	40
NI	Ontario	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	185	of ANT	N IN	Ontario	
SUMPTION	Manitoba	62,057 662 2,157 13,939 18,027 23,290	120,132	outputs	VSUMPTIO	Manitoba	3,308 7,710 870
SOLD FOR CONSUMPTION IN	Saskat- chewan	114,670 9,490 4,447 48,984 95,604	273,195	the total	SOLD FOR CONSUMPTION	Saskat- chewan	7,700 16,060 232
SOLD	British Columbia	56,761 6,541 4,248 1,613	69,163	tes how	SOLI	British Columbia	5,177 4,368 31,225
	Alberta	1,119,358 242,583 359,878 264,144 109,205 124,626	2,219,794	e indica		Alberta	14,941 71,519 232
		Crow's Nest Pass Canmore Brazeau Jasper Park Yellowhead Pass	Total	The following table ind			Anthracite Briguettes Coke

The Crow's Nest Pass was the only district in which Coke was produced during the year, and Banff in which Briquettes were produced,

The following tables give particulars of work done at the Shale Mines in the Province:

BRICKS IN TONS OF 2,000 LBS. SOLD FOR USE IN

<u> </u>	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Saskatchewan - 17. ManitobaBrit. Columbia	192½	1151/2 2811/2	3091/2 8471/2	300 513½ 33 54	343	. 441 568 40 	2991/2	33314 448 33	129 1971 <u>4</u> 33	289 267 76	174 90	66	2,99214 4,42534 106 54 109
Total Sales 36	3631/2	397	1,157	9001%	887	1,049	7331/2	8141/4	3591/4	632	264	130	7,687
				SUTPUT	JT OF SHALE SHALE USED	TALE IN	OUTPUT OF SHALE IN TONS OF 2,000 LBS. SHALE USED IN MAKING BRICKS.	OF 2,00 NG BRI	00 LBS. CKS.				
District Jan.		Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Medicine Hat _ 2,306	90	824	1,338	340	642	936		918	610	433	131	1,420	9,898
				AVERA	GE NU	MBER	AVERAGE NUMBER OF DAYS WORKED	'S WOR	KED.				
District Jan.		Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Medicine Hat - 50	50	32	30	29	30	29	2	31	29	30	28	26	346

NUMBER OF MEN EMPLOYED IN SHALE MINES.

	Total. Average	8.1.2		Total. Average	20.8	Shots fired by: Elec. det. 335; by fuse 2,023.	Miss-Fires	0
	Dec.			Dec.	20	det. 335;	Mís	
	Nov.	7		Nov.	22	y: Elec.	Fuse	
	Oct.	- -		Oct.	21	ts fired 1	red by	105
NOMBEN OF MAIN PARTIONAL IN SHALL MINES.	Sept.	t- H	KS.	Sept.	21	Sho	Shots Fired by Fuse	
N CHICA	Aug.		3 BRIC	Aug.	23	. Ibs.	ים	te
י להיו	Jµly		MAKIN(July	67	1: 3,2784, EE MINI	Explosives used	95 lbs. Dynamite
יייייייייייייייייייייייייייייייייייייי	June	P =	MEN EMPLOYED MAKING BRICKS.	June	21	Explosives used: 3,2781% lbs. COPPER ORE MINES.	Explo	95 lbs
ATTENT J.	May	1	EMPL	May	22	Explo		
מושמת	April	114	MEN	April	21		Days worked	20
77.7	Mar.	1-11		Mar.	22	al feet.	Day	
	Feb.	. 1		Feb.	24	7,925 line	yed	
	Jan.	16 3		Jan.	31	er used:	en Emplo	
Att the second second		Below Ground Above Ground		District	Medicine Hat	Mine Timber used: 7,925 lineal feet.	Number of Men Employed	10

The following table shows the total output of DOMESTIC Coal in Districts during each month:

Total.	3,955 857,092 1,83,485 1,7283 1,7283 1,7283 1,068 8,069 8,178 9,783 9,783 9,783 1,78	3,035,061
Dec.	641 77,151 77,151 17,611 17,611 17,611 85,938 87,938 87,76 1,252 1	293,562
Nov.	747 57,317 1,045 13,029 13,029 1,140 1,140 1,140 1,140 1,265 2,944 3,411 6,672 6,672 1,7829 1,7829 1,7829 1,7829 1,7829 1,7829 1,7829 1,7829 1,7829 1,7829 1,7829 1,7829	260,386
Oct.	78, 420 215, 215, 216, 216, 217, 218, 218, 218, 217, 218, 218, 218, 218, 218, 218, 218, 218	300,065
Sept.	180 69,884 19,728 19,728 105,691 2,579 2,455 1,1287 2,108 2,958 1,257 2,958 1,247 1,247 1,455 2,958 1,455 2,958 1,455 1,	282,337
Aug.	206 77,510 19,818 1,944 1,944 1,944 1,150 2,170 2,170 2,116 2,194 1,455 11,455 11,455 11,455 11,455 11,455 11,455	294,571
July	20,319 17,544 182,024 1,402 1,402 1,402 1,609 1,052 3,276 3,276 3,276 3,276 3,276 3,276 3,276 3,276 3,276 3,277 3,276	283,997
June	2,200 13,146 13,146 13,146 2,381 1,463 1,463 1,258 1,258 1,125 1,1	242,911
May	142 60,172 5,915 1,917 1,329 1,329 1,329 1,457 1,245 1,245 1,546 1,546 1,546 1,546 1,546 1,546 1,546 1,546 1,546 1,546 1,952 1,952 1,952 1,952 1,952 1,952 1,952 1,962 1,9	156,025
April	63,290 82,290 2,829 390 173 174 2,721 174 1776 173 1,113 1,113 1,776 1,77	109,458
Mar.	213,464, 23,464, 24,136, 24,136, 24,136, 24,136, 24,136, 24,136, 24,136, 24,136, 24,136, 25,13	174,104
Feb.	80 113 113 113 113 113 113 113 113 113 11	249,693
Jan.	86,286 86,286 24,165 24,165 2,1653 2,603 4,535 4,036 4,036 4,036 11,871 10,357 11,871 11,871 11,871 11,871 11,871 11,871 11,871 11,871 11,871 11,871 11,871 11,871 11,871	387,952
District	Pincher Creek Lethbridge Magrath Milk River Taber Taber Bow Island Medicine Hat Aldersyde High River Drumheller Big Valley Brooks Trochu Lacombe Carbon Battle River Camrose Camrose Candiff Clover Bar Clover Ba	Total

The following table shows the total output of BITUMINOUS Coal in Districts during each month:

	0			•									
District	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Crow's Nest Pass Canmore Brazeau Jasper Park Yellowhead Pass	133,731 23,969 28,354 23,892 16,724 19,123	118,437 23,664 24,903 22,197 11,903 17,762	138,833 23,520 23,388 29,658 13,806 18,886	148,583 26,225 32,444 30,605 15,410 17,261	141,811 22,710 35,596 27,586 15,327 16,668	148,879 24,479 32,425 18,898 16,133 18,841	147,945 25,477 35,377 19,565 16,919 23,508	141.136 22,953 41,778 22,276 19.109 27,269	131,675 23,981 37,672 25,900 20,461 24,670	121,680 24,757 38,764 26,693 22,037 27,780	107,032 21,468 17,538 15,671 9,946 20,974	121,744 11,506 23,322 21,001 18,197 22,521	1,601,486 274,709 371,562 283,342 195,972 255,263
Total	245,793	218,866	247,491	270,528	259,698	259,655	268,791	274,522	264,359	261,711	192,629	218,291	2,982,334
The following table shows the total output of ANTHRACITE Coal during each month	ing tabl	e shows	the tota	l output	of AN	PHRACI	TE Coa	l during	each me	onth:			
District	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Banff	12,623	13,165	13,621	14,219	12,141	9,907	11,368	10,308	10,021	9,601	6,139	8,112	131,225
The following table sh	ing tabl	e shows	ows the total output of COAL, BRIQUETTES	l output	of COA	L, BRI	QUETTI	and	COKE during	uring ea	each month	h :	
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Coal Briquettes Coke	646,368 8,801 2,670	481,724 7.827 2,272	435,216 9,615 2,934	394,205 10,679 3,503	427.864 9,900 3,220	512,473 6,602 3,364	564,156 9,108 3,162	579,401 9,427 3,560	556.717 7,648 3,340	571.377 7,741 2,460	459,154 6,491 1,250	519,965 6,631 1,123	6,148,620 100,470 32,858

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Pincher Creek _	374	361	215	149	142	201	319	206	180	420	747	635	3.949
Lethbridge	77,039	70,748	65,217	53,992	49.451	54.020	59.200	64.037	58.110	66.152	49.012	66.120	733,098
Magrath	48	39	27	-	, 1	1	130	168	147	215	514	287	1,582
Milk River	553	523	379	230	332	365	405	392	623	944	1,045	670	6,461
Taber	19,127	18,238	4,780	1,707	4,171	10,130	13,947	15,743	15,114	16,759	10,510	14,098	144,324
Bow Island	573	558	390	375	448	330	356	362	566	1,264	1,074	210	6,806
Medicine Hat _	2,505	993	401	171	210	522	1.307	1,866	2,492	3,703	1,880	2,189	18,239
Aldersyde	989	909	551	276	353	173	433	370	651	1,340	1,345	749	7,533
High River	53	65	20	24	38	25	20	2	29	102	66	48	260
Drumheller	88,706	11,135	27,003	6,105	35,707	89,541	115,164	119,084	97,423	74,670	70,621	79,925	815,084
Big Valley	4,485	3,512	2,392	738	1,927	2,331	2.948	2,120	2,405	3,507	4,038	3,726	34,129
Brooks	1062	824	619	214	451	433	983	437	1,182	1,911	1,075	808	9,727
Hanna	2,721	2,818	1,896	477	1,251	1,393	1,565	838	2,033	4,975	5,078	3,141	28,186
Lacombe	3,452	2,975	985	154	455	259	302	231	757	1,679	1,865	1,198	14,312
Trochu	2,586	2,271	1,053	105	266	764	872	968	942	1,585	2,301	2,323	15,454
Three Hills	3,363	3,186	1,132	390	1,248	2,190	2,579	2,309	1,806	2,235	2,662	1,592	24,693
Carbon	240	637	340	137	305	351	576	372	342	785	661	363	5,409
Battle River	2,144	2,257	821	17	24	65	103	35	107	1,143	2,386	2,423	11,555
Camrose	9,758	7,990	3,576	1,571	1,569	2,005	2,581	2,089	2,863	5,172	6,144	7,453	52,771
Tofield	13,772	7,485	4,065	2,243	2,415	2,706	3,719	5,500	4,851	6,499	6,535	5,005	64,795
Clover Bar	41,626	28,830	15,145	6,393	8,467	18,511	18,555	15,423	17,527	21,337	24,172	22,862	238,848
Edmontón	17,058	12,847	6,779	4,497	4,133	6,492	7,512	3,424	6,045	8,830	9,818	9,270	96,706
Namao	2,879	2,786	1,159	764	841	1 226	1,184	1,298	1,268	1,943	1,531	2,299	18,929
Cardiff	43,037	30,722	12,435	8,897	14,178	18,437	12,992	14,318	22.261	25.781	16.878	28.244	248,180
Wabamun	2,514	1,878	1,426	494	611	1,303	1,159	1,368	1.664	1.670	2.593	2,051	18,731
Pembina	12,683	7,925	2,232	1,518	6,456	8,083	6,255	10,020	10,047	13,363	9.679	6.816	95.077
Peace River										- (:-		=	
										 	 	! ! !	
Total	353.072	222.209	155.068	91.645	135.479	221.107	255 157	969 913	251 435	967 984	934 964	11 808 896	9 715 138
	1.0600	10161	70000	0 T) 0 T 0	Too, Tie		100,000	010,000	COT, LC2	700,107	107,107	704.000	67,77

The following table shows the total sales of BITUMINOUS Coal in Districts during each month:

Total.	1,482,928 259,276 366,482 278,083 180,649 245,133	2,812,551		Total.	31,166		Total.	5,558,855 99,657 32,661
Dec.	114,837 10,223 22,840 20,411 16,002 21,606	205,919		Dec.	1,769		Dec.	472,493 6,670 794
Nov.	97,974 19,926 17,053 15,047 8,648 20,131	178,784	•	Nov.	1,254	month:	Nov.	414,302 6,463 1,213
Oct.	114,219 23,336 38,257 26,097 20,558 26,900	249,367	th:	Oct.	2,269	and COKE during each month	Oct.	519,620 7,273 2,846
Sept.	125,069 22,543 37,047 25,345 18,816 23,765	252,585	ows the total sales of ANTHRACITE Coal during each month	Sept.	2,435	KE dur	Sept.	506,455 7,628 3,094
Aug.	128,681 21,591 41,284 22,222 17,647 26,405	257,830	uring ea	Aug.	2,721	and CO	Aug.	523,464 9,326 3,502
July	139,894 24,141 35,636 19,319 15,856 22,605	257,451	Coal d	July	3,087	ows the total sales of COAL, BRIQUETTES	July	515,695 8,900 3,330
June	138,297 23,243 32,297 18,444 15,198 18,033	245,512	RACITI	June	2,583	, BRIQU	June	469,202 6,596 3,181
May	131,353 21,527 35,128 27,155 14,268 15,863	245,294	f ANTH	May	2,869	f COAL	May	383,642 9,888 3,410
April	136,883 25,024 31,902 30,215 14,248 16,436	254,708	l sales o	April	2,679	l sales o	April	349,032 10,670 3,375
Mar.	125,403 22,353 22,879 28,660 12,735 18,069	230,099	the tota	Mar.	3,093	the tota	Mar.	388,260 9,615 2,934
Feb.	107,535 22,504 24,359 21,779 10,869 17,013	204,059	swows	Feb.	3,245	e shows	Feb.	429,513 7,827 2,312
Jan.	22,783 22,865 27,795 23,389 15,279	230,418	ing table	Jan.	3,162	ing table	Jan.	586,652 8,801 2,670
District	Crow's Nest Pass Canmore Brazeau Jasper Park Yellowhead Pass	Total	The following table sho	District	Banff	The following table sh		Coal Briquettes Coke

The following table shows the amount of DOMESTIC Coal sold du

T 04 :	Total.	3,683	230,569	1,082	23,387	6,806	7.533	260	158,344	32,984	9,727	28,186	13,399	14,888	16,339	5.409	11,555	34,311	50.338	186,492	82,454	12,909	208.802	9.244	43,144		1,205,419
Tot consumption in Arbeita	Dec.	635	20,745	187	3,167	510	749	48	17,703	3,726	808	3,141	1,198	2,147	1,345	363	2,423	4,000	3.622	20,773	8.512	1,964	25.963	961	2.478		128,491
morodimo	Nov.	747	18,574	1.045	2,286	1,074	1.345	66	16,131	4,038	1,075	5,078	1,865	2,224	1,985	661	2,386	4,850	4.846	20,719	8.983	1.330	15.930	1.328	3.421		123,448
TOT TOT	Oct.	420	19,508	923	2,167	1,264	1,340	102	13,528	3,507	1,911	4,975	1,679	1,522	1,586	785	1,143	3,557	4.607	18,355	7,673	1.567	22.214	899	6.226		123,010
Tamom 1	Sept.	180	17,929	618	1,405	566	651	29	13,768	2,405	1,182	. 2,033	757	878	1,338	342	107	1,585	3,834	14,125	5,211	722	18.239	708	2.949		92,639
Pora daring cach	Aug.	206	18,953	392	1,616	362	370	7	17,873	2,120	437	838	231	803	1,108	372	35	1,165	4,540	11,086	2,628	825	11.263	762	3,736		82,373
SOLU UU	July	264	18,880	405	1,437	356	433	20	16,712	2,885	983	1,565	302	692	870	929	103	1,545	2,318	11,232	5,764	592	10,393	582	3,031		82,429
00000	June	170	17,206	365	1,370	330	173	25	13,790	2,228	433	1,393	259	264	1,166	351	65	783	2,436	11,764	5,016	543	15,747	847	4,052	1	80,856
	May	112	13,709	332	1,021	448	353	38	9,603	1,927	451	1,251	455	266	832	302	54	866	2,198	6,478	3,948	206	12,857	395	3,780		62,344
	April	149	19,113	230	096	375	276	24	2,273	738	214	477	154	105	390	137	17	903	2,243	5,762	4,435	899	8.632	324	1,238		49,903
	Mar.	155	21,270	379	2,155	390	551	20	8,077	2,392	619	1,896	985	1,053	1,132	340	821	2,114	3,975	13,185	6,218	868	11,695	1,298	1,777		83,594
	Feb.	271	18,808	523	2,762	188	909	65	3,921	2,823	824	2,818	2,487	2,271	2,256	637	2,257	5,502	5,722	20,733	10,331	1,765	23,477	618	3,550		115,812
	Jan.	374	25,874	553	3,041	573 345	989	53	24,965	4,195	790	2,721	3,027	2,586	2,331	540	2,144	7,309	9,997	32,285	13,735	1,528	33,392	522	6,906		180,520
	District	Pincher Creek -	Letabridge	Milk River	Taber	Bow Island	Aldersyde	High River	Drumheller	Big Valley	Brooks	Hanna	Lacombe	Trocau	Three Hills	Carbon	Battle River	Camrose	Tofield	Clover Bar	Edmonton	Namao	Cardiff	Wabamun	Pembina	Peace River	Total

The following table shows the amount of DOMESTIC Coal sold during each month for consumption in British Columbia: 14,770 26,849 210 631 32 4,091 Total. 1.180 4,866 2,292 89 551 Dec. 1,388 2,745 517 2 291 Nov. 2,325 482 1.078 4,389 401 39 34 Oct. 3,470 505 328 32 798 1,223 33 551 Sept. 1,150 2,162 489 264 96 163Aug. 1,246 837 35 62 July 160 875 391 167 34 96 June 1,126 550 495 81 May 292 567April 881 973 Mar. 1,385 1,657 133 104 Feb. 2,773 1,781 397 30227 Jan. Lethbridge ----Pincher Creek Medicine Hat Milk River --Battle River Peace River Aldersyde ---High River District Taber ____Bow Island Three Hills Big Valley Brooks Drumheller Lacombe --Camrose __ Edmonton _ Clover Bar Carbon --Wabamun Namao Cardiff Total Trochu Tofield Hanna

The following table shows the amount of DOMESTIC Coal sold during each month for consumption in Saskatchewan:

Sept. Oct. 32,743 37,403 11,426 10,654 1,318 2,022 60,350 42,171		Aug. 37,312 37,312 11,106 11,224 1,430 74,430 93		July 31,669	July 31,669	June July 7 27,395 31,669 8 5,957 9,334 8 382 710 7 28,286 68,063	May June July 3	April May June July 29,183 25,797 27,395 607 2,703 5,957 112 112 183 38,286 68,063 3,566 15,832 38,286 68,063
		37,315 11,100 1,222 74,438		31,669	31	25,797 27,395 31,669 31,669 32,703 5,957 9,334 382 38,286 68,068 5	29,183	1.524
		37,31 <u>5</u> 11,10(1,224 74,43(31,669 9,334 710 68,063 68,063	27,395 31,669 5,957 9,334 382 710 382 710	25,797 27,395 31,669 2,703 5,957 9,334 183 382 710 15,832 38,286 68,063	29,183 25,797 27,395 31,669	183 33,312 29,183 26,797 27,395 31,669 547 1,524 607 2,703 5,957 9,334 340 180 112 183 382 710 185 16,341 3,566 15,832 38,286 68,063 194 186 16,341 3,566 16,832 38,286 68,063
1 1 1 4 1		11,106		9,334	5,957 9,334 382 710 38,286 68,063 38,286 93	2,703 5,957 9,334 183 382 710 15,832 38,286 68,063	607 2,703 5,957 9,334 112 183 382 710 3,566 15,832 38,286 68,063	1,524 607 2,703 5,957 9,334 180 112 183 382 710 16,341 3,566 15,832 38,286 68,063
1 4		11,106		68,063	5,957 9,334 382 710 38,286 68,063	2,703 5,957 9,334 183 382 710 15,832 38,286 68,063 16,832 38,286 93	607 2,703 5,957 9,334 112 183 382 710 3,566 15,832 38,286 68,063 10 10 10	1,524 607 2,703 5,957 9,334 180 112 183 382 710 16,341 3,566 15,832 38,286 68,063
4		1,224		710 68,063 77 68,063 77 77 89	382 710 38,286 68,063 77	15,832 38,286 68,068 770 770 770 770 770 770 770 770 770 77	3,566 15,832 38,236 68,063 77 77 77 77 77 77 77 77 77 77 77 77 77	180 112 183 382 710 16,341 3,566 15,832 38,286 68,063 7
1 1 1		74,430		68,063	38,286 68,063 7	15,832 38,286 68,063 7	3,566 15,832 38,286 68,063 77	16,341 3,566 15,832 38,286 68,063
<u> </u>	<u> </u>	74,430		68,063	38,286 68,063 77	15,832 38,286 68,063 77	3,566 15,832 38,286 68,063 77	16,341 3,566 15,832 38,286 68,063
		93		66		93		394
	<u> </u>	93		93		93		394
		93		86	_	93	_	
				<			00	83
468 527	1	1,125		1,540		483 1,540	483 1,540	266 1.540 483 1,540
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	_	1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					
-	4	84	1 1	1,195 1,036	1,195 1,036	1,195 1,036	571 1,195 1,036	638 , 571 1,195 1,036
761 1,44	_	830	1,124 83	120 1,124	1,124	62 120 1,124	62 120 1,124	90 62 120 1,124
	31	3,6		5,107 5,727	5,107 5,727	5,107 5,727	65 823 5,107 5,727	1,174 65 . 823 5,107 5,727
	372			1,389 1,370	1,389 1,370	1,389 1,370	185 1,389 1,370	5,621 62 185 1,389 1,370
	380	•••		434 560	434 560	335 434 560	96 335 434 560	165 96 335 434 560
	66	⊢ ,		2,207 2,210	2,207 2,210	1,064 2,207 2,210	265 1,064 2,207 2,210	620 265 1,064 2,207 2,210
	82	ক		209 369	209 369	. 186 209 369	186 209 369	96 186 209 369
4,010 2,163	85	4,3		2,600	2,600	2,600	61 1,362 2,600	345 61 1,362 2,600
	<u> </u> 							
119.984 105.383		138,433	126,405 138,48	l	126,405	84,557 126,405	47,925 84,557 126,405	34,655 47,925 84,557 126,405

The following table shows the amount of DOMESTIC Coal sold during each month for consumption in Manitoba:

Maniecoa.	Total.	180	31,170	1,677	124	2,615	996	3,628	1,620	9,155	21,747	387,728
.	Dec.	4,357	1,837	20,025		33	30	367	136	700	1,066	29,394
comsumbanos	Nov.	4,275	1,457	132		33 193		353	334	32	2,943	29,364
TOT	Oct.	6,882	3,245	188		92		451	170	203	3,896	34,780
еасп шопп	Sept.	6,215	1,731	122				256		610	2,290	35,075
uuring ea	Aug.	6,622	2,757	26,292		92	08	130	124	1,060	1,736	39,840
sora ar	July	7,814	3,089	30,143		129		277	379	354	562	44,686
10 Coa	June	9,028	2,636	37,240		541		150	28.4	449	2,573	54,724
OTTENTION	May	30 9,395	447	10,191		232		155	001,1	257	2,149	24,052
•	April	5,129	140	266				9 2		170	219	6,520
rue amount or	Mar.	9,754	1,009	2,585			1	786	26	120	110	14,591
SMOMS	Feb.	90	8,796	305		664	1 2	459	108	2,790	2,039	34,544
ing tabl	Jan.	8,298	-	17,047		688	63	1,030	213	2,580	2,166	40,160
THE TOHOWING PADIE SE	District	Pincher Creek	Milk River Taber Bow Island	Medicine Hat	Brooks	Trochu Three Hills	Battle River	Tofield	Edmonton	Cardiff	Penbina Peace River	Total

The following table shows the amount of DOMESTIC Coal sold during each month for consumption in Ontario:

	Total.	115 91 172 32 34 34	444
auring each month for consumption in Ontario:	===		47
тт по	Dec.		
ndmrasn	Nov.	8 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	. 124
na lor i	Oct.	38	34
си иопт	Sept.	47	24
лгіпу еа	Aug.		
I sola al	July	61	61
TTC COS	June	99	65
COMPESS	May	34	34
onut of	April		! ! ! !
tne am	Mar.		1
e snows	Feb.	322	32
nng tabi	Jan.		1 1 1 1
The following table shows the amount of Domesto Coal sold	District	Pincher Creek Lethbridge Magrath Milk River Taber Labow Island Bow Island Medicine Hat Aldersyde High River Big Valley Brooks Lacombe Lacombe Carbon Three Hills Carbon Battle River Carbon Carbon Carbon Battle River Carbon Carbon Carbon Battle River Carbon Carbon Battle River Carbon Carbon Battle River Carbon Perfield	Total

The following table shows the amount of DOMESTIC Coal sold during each month for consumption in the United States: $\frac{55}{191}$ 3,154 Total. 80 505 Dec. 453 745 Nov. $\begin{array}{c} 21 \\ 211 \end{array}$ 156 388 Oct. 94 121 220Sept. 105 105 Aug. 55330July 30 30 June May April 40 Mar. 34160 194 Feb. 157 597 Jan. Carbon ------Battle River --Pincher Creek High River ___ Drumheller ___ Big Valley ___ Medicine Hat Aldersyde Lethbridge Milk River Taber Peace River Trochu ____Three Hills District Camrose ---Tofield Clover Bar Lacombe ---Magrath ___ Bow Island Edmonton Wabamun Namao Cardiff Total Brooks Hanna

The following table shows the amount of BITUMINOUS Coal sold during each month for consumption in Alberta:

District	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Crow's Nest Pass Cannore Brazeau Jasper Park Yellowhead Pass	88,411 20,997 27,795 23,389 9,284 13,009	86,584 21,704 24,359 21,779 7,756	102,970 21,215 22,879 28,660 10,952 12,416	111,285 24,055 31,381 30,215 10,820	100,386 20,003 34,144 27,155 11,001 9,977	100,101 21,525 31,552 18,384 10,121 9,872	95,190 22,880 34,744 19,319 7,569 10,246	87,103 20,108 40,279 22,222 9,733 8,927	94,626 20,739 36,169 18,184 10,625 7,348	90,288 21,762 37,151 19,379 9,364 11,845	68,159 18,339 16,714 15,047 2,652 8,272	94,255 9,256 22,711 20,411 9,328	1,119,358 242,583 359,878 264,144 109,205 124,626
Total	182,885	174,519	199,092	218,203	202,666	191,555	189,948	188,372	187,691	189,789	129,183	162,891	2,219,794

The following table shows the amount of BITUMINOUS Coal sold during each month for consumption in British Columbia:

Total.	56,761	4,248	69,163
Dec.	801	753	3,893
Nov.	2,258	524	3,786
Oct.	3,409	562	4,938
Sept.	4,476	718	6,571
Aug.	4,023	352	4,969
July	3,173	273	3,575
June	3,434	253	3,687
May	3,729	262	5,519
April	4,488	355	5,244
Mar.	6,307	93	6,874
Feb.	5,602		6,127
Jan.	13,563	103	13,980
District •	Črow's Nest Pass Canmore Brazeau	Jasper Park Yellowhead Pass Mountain Park	Total

S Coal sold during each month for consumption in Saskatchewan:
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Total.	114,670 9,490 4,447	48,984 95,604	273,195
Dec.	9,905 166 129	5,921 8,919	25,040
Nov.	4,985 685 208	5,047	19,885
Oct.	5,961 560 602	9,066	29,050
Sept.	7,981 972 302	5,636 13,195	28,086
Aug.	13,984 1,350 763	4,868	35,147
July	13,496 1,022 730	4,828	29,171
June	10,167 673 498	2,251	19,949
May	10,478	1,558	17,550.
April	7,592 568 448	2,954	17,257
Mar.	8,070	1,380	14,193
Feb.	9,606	2,338	16,060
Jan.	12,445	3,137	21,807
District	Crow's Nest Pass Canmore	Jasper Park Yellowhead Pass Mountain Park	Total

The following table shows the amount of BITUMINOUS Coal sold during each month for consumption in Manitoba:

Total.	62,057 662	2,157	18,027 23,290	120,132
Dec.			525 2,717	3,849
Nov.	11,565	136	425 2,797	14,923
Oct.	2,867	504	1,566	13,896
Sept.	2,276	576	1,837	14,527
Aug.	11,098	242	2,694 2,735	16,869
July	11,752	162	3,186 3,169	18,474
June	9,302	247	2,573	15,028
May	7,076	217	1,447	9,875
April	2,247	73	119 294	2,733
Mar.	458		310 1,574	2,342
Feb.	987		775 835	2,597
Jan.	1,822		2,570	5,019
District	Crow's Nest Pass	Brazeau	Yellowhead Pass Mountain Park	Total

The following table shows the amount of BITUMINOUS Coal sold during each month for consumption in Ontario:

District	Jan.	Feb.	Mar.	Mar. April	May	June	July	Aug.	Sept.	Sept. Oct.	Nov.	Dec.	Total.
Crow's Nest Pass Canmore Brazeau Jasper Park Yellowhead Pass 185 Mountain Park	185												182
Total	185	1 1		1 1	1			1 1 1	 				185

The following table shows the amount of BITUMINOUS Coal sold during each month for consumption in United States:	Total.	130,082	130,082
tion in L	Dec.	7,771	7,771
onsumb	Nov.	11,007	11,007
nth for	Oct.	11,694	11,694
each mo	Sept.	9,684 15,293 16,283 12,473 15,710 11,694 11,007	16,283 12,473 15,710 11,694 11,007
during	Aug.	12,473	12,473
oal sold	July	16,283	16,283
NOUS (June	9,684 15,293	9,684 15,293
BITUMI	May June		
ount of]	Mar. April	7,598 11,271	7,598 11,271
the amo	Mar.	7,598	
e shows	Feb.	4,756	4,756
ing tabl	Jan.	6,542	6,542
The follow	District	Crow's Nest Pass Canmore Brazeau Jasper Park Yellowhead Pass Mountain Park	Total

The following table shows the amount of Anthracite Coal, Briquettes and Coke respectively sold during each month for consumption in Alberta:

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Anthracite Briquettes Coke	1,892 6,982	1,897 5,760 30	2,202	835	786 8,414 33	864 4,750	1,211 5,983	1,174	1,302 4,080	1,155 4,818 110	638 4,409 55	985	14,941 71,519 232

The following table shows the amount of Anthracite Coat, Briquettes and Coke respectively sold during each month for consumption in British Columbia:

April	٠.	Mar.	Feb. Mar.
	862	207 862	207 862
,345 3,266	3,345	2,934 3,345	3,345
_			

The following table shows the amount of Anthracite Coai, Briquettes and Coke respectively sold during each month for consumption in Saskatchewan:

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Anthracite 763 8 Briquettes 1,221 1,6 Coke	1,221	841	257	760	1,156 886 78	914 889 33	690 887 33	2,610	637 2,822	632 1,593 88	1,269	1,111	7,700 16,060 232

The following table shows the amount of Anthracite Coal, Briquettes and Coke respectively sold during each month for consumption in Manitoba:

Dec. Total.	76 3.308 949 7,710 30 870
Nov.	33 670 33
Oct.	631 391
Sept.	87 241 99
Aug.	394 1,647 144
July	1,807 1,807
June	449 838 33
May	664 416 33
April	416 74
Mar.	387
Feb.	104
Jan.	219
	Anthracite 111 1 219 1 Coke

The following table shows the amount of Anthracite Coal, Briquettes and Coke respectively sold during each month for consumption in Ontario:

MINES	BRANCH
Total.	
Dec.	
Nov.	
Oct.	
Sept.	
Aug.	
July	
June	
May	
April	
Mar.	
Feb.	
Jan.	
	Anthracite Briquettes Coke

The following table shows the amount of Anthracite Coal, Briquettes and Coke respectively sold during each month for consumption in United States:

Total.	40	102
Dec.		
Nov.		30
Oct.		
Sept.		
Aug.		
July	1	
June		
May		
Mar. April	1	42 30
Mar.	40.	1 1 1 1 1 1 1
Feb.	1	
Jan.		
	Anthracite	!

The following table shows the amount of DOMESTIC Coal used during each month under Colliery Boilers:

											.		
District	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Pincher Greek													
Lethbridge	6,290	6,029	5,712	6,888	6,392	6,278	6,267	6,735	6,236	686,9	6,524	6,936	77,276
Milk River					7					1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	/ J		7 7
Taber	2,390	2,245	1,045	895	1,153	1,428	1,865	1,961	1,907	2,040	1,686	1,722	20,337
Medicine Hat	1 1 · 1 · 1 · 1 · 1 · 1 · 1 · 1 · 1 · 1			T .		1 1 1 1 1 1 1 1 1 1	2	120	72	5	5	69	21
High River					1, 1	1	1	1					
Drumheller Big Valley	4,627	1,841	1,935	1,405	2,863	3,670 50	4,380	4,449	4,274	3,859	4,407	4,063	41,773
Brooks	54	51	209	37	41	40	49	48	48	09	59	51	588
Lacombe	1 6		11		54.	89		1			7.1.		113
Trochu	35	999	15	ກຸ	10	61	108	110	97	0.00	42	105	624
Carbon			20	45	200	181	196	189	154	191	180	131	1,848
Battle River						1 1		1 1 1 1 1 1 1 1 1 1			2		
Camrose	124	111	70	75	22	72	89	75	65	171	159	180	1,245
Tofield	61	53		3	31	92	120	150	150	151	20	102	1,021
Clover Bar	1,611	1,401	_	1,248	1,372	1,430	1,665	1,608	1,428	1,601	1,648	1,411	17,663
Edmonton	222	830		069	705	673	702	733	822	1,086	1,155	1,045	10,010
Namao	- pq	7.c		30	30	34	36	36	35	40	34	32	444
Cardiff	1,319	1,174	_	1,032	1,024	296	1,137	958	1,213	1,231	951	1,095	13,266
Wabamun	36	. 64		40	30	36	39	36	36	36	45	45	519
Pembina	1,035	701		379	405	358	307	372	342	812	674	835	6,813
Peace Kiver	1	1 1 1 1 1 1 1	1										1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Total	18,648	14,774	12,903	12,831	14;440	15,371	17,021	17,513	16,859	18,345	17,669	17,774	194,148
												==	•

Bollers:	
ler Colliery Boilers	-
ı under	
sed during each month under Col	
during ea	
n nsed	
IS Cos	
of BITUMINOUS Coal used d	
of BI	
e amount	
e shows th	
The following table	,
e follo	
Γ he	

SI'S:	Total.	60,651 15,408 5,991 5,259 12,229 10,130	109,668
ery Doll	Dec.	4,731 1,283 542 590 935	8,996
ier Com	Nov.	4,477 1,542 480 624 876 843	8,842
onta unc	Oct.	4,079 1,421 507 507 1,153 880	8,636
amount of BITUMINOUS Coal used during each month under Collery Dollers:	Sept.	3,846 1,438 455 555 1,105 905	8,304
t during	Aug.	4,295 1,362 470 54 1,108 864	8,153
oal use	July	4,067 1,336 443 246 1,038 903	8,033
NOON	June	5,405 1,221 482 454 935 808	9,305
SITUMI	May	5,370 1,178 468 431 1,004 805	9,256
unt of 1	April	5,823 1,196 542 390 1,015 825	9,791
the amo	Mar.	6,325 1,167 509 398 1,025 817	10,241
e shows	Feb.	5,874 1,160 544 418 1,034 749	9,779
ing tabl	Jan.	6,359 1,104 549 503 1,001 816	10,332
The following table sl	District	Crow's Nest	Total

28,837 Total. The following table shows the amount of ANTHRACITE Coal used during each month under Colliery Boilers: 2,399 2,340 \mathbf{July} June Jan. Banff District

OUTPUT AND NUMBER OF MINES PRODUCING.

	10,0	Under 10,000 Tons		From 10,000 to 50,000 Tons	. 20.	From 50,000 to 100.000 Tons	10.	From 100,000 to 200,000 Tons	30,	From 200,000 to 300,000 Tons	300	From 300,000 to 400,000 Tons	.04°.	From 400.000 to 500.000 Tons		Total
	, o N	Output	No.	Output	No.	Output	No.	Output	No.	Output	No.	Output	No.	Output	No.	Output
DomesticBituminousAnthracite	243	223,233	29	667,357	13	928,192	ಗಣಬ	559,480 444,001 131,225	H.4 -	293,659 1,063,654	1.62	363,140 688,240		434,863	292 24 1	3,035,061 2,982,334 131,225
Total	250	226,793 34	34	806,592	16	806,592 16 1,136,973	6	9 1,134,706		5 1,357,313	က	3 1,051,380	H	434,863 317	317	6,148,620

In addition to the mines shown in above table as being in operation, two copper mines and two shale mines were operated during the year 1918.

The following table shows the classification of persons employed in the DOMESTIC, BITUMINOUS and ANTHRACITE Coal Fields, at December 31, 1918:

			UNDERG	UNDERGROUND					ABO	ABOVEGROUND	Q.			Total
	Super- vision	Miners and Helpers	Haulage Employ-	Mechan's and Skilled Labour	Others	Total	Super- vision	Mechan's and Skilled Labour	Clerical Assistance	Others	Coke Ovens	Briquette Plant	Total	ground and Above- ground
Domestic Bituminous Anthracite	218 143 9	2,828 1,565 86	676 470 9	54	428 496 30	4,372 2,728 134	115 45 1	387 240 39	112 67 7	1,087 746 105	13	11	1,701 1,111 163	6,073 3,839 297
	370	4,479	1,155	276	954	7,234	161	999	186	1,938	13	11	2,975	10,209

The following table shows the classification of persons employed in the DOMESTIC Coal Field at December 31, 1918:

		-	UNDER	UNDERGROUND				A B	ABOVE GROUND	ND		1
Districts	Super- vision	Miners and Helpers	Haulage Employ- ees	Mech's and Skilled Labour	Others	Total	Super- vision	Mech's and Skilled Labour	Clerical Assist- ance	Others	Total	Total Undergroud and Above Ground
Pincher Creek	85 TG	20 671	225	115	888	23	11	144	21	254	3 435	26 1,592
Magrath	14	42 237	34	6	24	318	H 00	21	8	51	688	406 9.5
Bow Island	41 eo eo	13 19	9	2	9	23 23 23	1 2	1		1∞⊢	7 II 6	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
High River Drumheller Big Valley	48	855 43	272	56	122	1,353	34	103	34	357 15	528 20	1,881
BrooksHannaT.	2 2 2	25 to 82 to			1	m ⊗ 6 6 7	⊣ ~ 4	00 60	1	7 2	23 11	91
Trochu Three Hills	969	328	H 44	1	3	44 44 4	ଟ ସେ 1	2 -1	1 22	19	11 33	47 26
Carbon Battle River Camrose Camrose	o 12 es	15 38 67	6		1	18 82 82	1 9	22	1 6	35	T 6 6 9 T	151
TofieldClover Bar	119	205 117	41	16	98	379 167	67 F~ 69	25 18	es ∞ £1	21 21 21	56 123 55	61 502 222
Namao Cardiff	67 TO 6	148	∞ 83 €	8 -	45	229	67 17- 6	143	10+	109	135 135	364
Wabamun Pembina Peace River	വം	20	13	- ∞	21	26	ေရ	# 90	14	31	46	143
Total	218	2,828	929	222	428	4,372	115	387	112	1,087	1.701	6,073

The following table shows the classification of persons employed in the BITUMINOUS Coal Field at December 31, 1918:

Total	Underground and Above Ground	1,721 335 486 511 452 334	3,839
	. Total	465 118 103 85 237 103	1,111
	Coke Ovens	13	13
ROUND	Others	319 73 50 56 180 68	746
ABOVE GROUND	Clerical Assist- ance	71116118	29
	Mech's and Skilled Labour	96 30 37 18 37 22	240
	Super- vision	0470900	45
	Total	1,256 217 383 426 215 231	2,728
	Others	315 49 119 122 48	496
ROUND	Mech's and Skilled Labour	4 4 6 1 1 1 1 1 1 1 1 1	54
UNDERGROUND	Haulage Employ-	217 455 882 824 447	470
	Miners and Helpers	648 102 234 306 123	1,565
	Super- vision	172 113 123 145	143
	Name of District	Crow's N. Pass. Canmore Brazeau Jasper Park Yellowhead Pass	Total

The following table shows the classification of persons employed in the ANTHRACITE Coal Field at December 31, 1918:

		-	UNDERG	UNDERGROUND					ABOVE GROUND	ROUND			£
Name of District	Super- vision	Miners and Helpers	Haulage Employ-	Mech's and Skilled Labour	Others	Total	Super- vision	Mech's and Skilled Labour	Clerical Assistance	Others	Briquette Plant	Tote 1	Underground and Above Ground
Banff	6	98	6		30	134	H	39	7	105	#	163	297

The following table shows the average number of persons employed during each month in the DOMESTIC Coal Field,

1,881 70 34 34 91 74 74 151 151 61 61 502 222 222 222 533 73 74 74 6,073Dec. 5,340 Nov. 1,645 28 28 28 34 37 50 20 31 102 99 429 235 46 276 402 402 28 61 26 5,394Oct. 1,721 39 21 21 23 49 49 49 88 88 88 424 209 38 38 38 367 31 31 4,795 Sept. 5,001 Aug. 4,629 July 1,380 10 10 10 115 115 148 8 8 8 44 79 79 187 187 20 20 122 4,304 1,338 June 3,5761,301 May 441 17 11 26 18 18 16 11 11 2,895April 398 398 21 18 18 18 4,587 Mar. 1,385 16 677 16 677 673 477 178 116 80 470 255 56 359 136 5,472 Feb. above and below ground: 5,883 Jan. Pincher Creek ----Magrath _____ Milk River Lethbridge -----Medicine Hat ---Clover Bar Cardiff ______ naper Bow Island Aldersyde -----Big Valley ----Three Hills High River Orumbeller ____ Brooks Camrose ----------Battle River ___ Edmonton ----Namao -----District. Peace River Wabamun Pembina Carbon Total rochu Pofield Hanna laber

The following table shows the average number of persons employed during each month in the BITUMINOUS Coal Field, above and below ground:

District.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Crow's Nest Pass. Canmore Jasper Park Wellowhead Pass Mountain Park	1,859 298 460 482 298 316	1,840 305 481 505 282 312	1,820 295 480 520 266 320	1,950 299 435 445 268 310	1,844 286 317 507 253 267	1,858 300 406 442 286 247	1,803 287 432 441 283 265	1,812 334 465 476 284 274	1,741 339 475 518 347 272	1,759 324 455 528 443 310	1,485 341 267 468 315 316	1,721 335 486 511 452 334
	3,713	3,725	3,701	3,707	3,474	3,539	3,511	3,645	5,692	9,619	9,T37	0,000

The following table shows the average number of persons employed during each month in the ANTHRACITE Coal Field, above and below ground:

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	nden.	;		367
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	293	291	285	276	284	266	279	289	290	295	285	297
wing t	The following table shows	ows the a	verage n	umber of	f persons	the average number of persons employed	during	each n	month in	the	DOMESTIC,	BITU-

MINOUS and ANTHRACITE Coal Fields, above and below ground:

District.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Domestic Bituminous Anthracite	5,883 3,713 293	5,472 3,725 291	4,587 3,701 285	2,895 3,707 276	3,576 3,474 284	4,304 3,539 266	4,629 3,511 279	5,001 3,645 289	4,795 3,692 290	5,394 3,819 295	5,340 3,192 285	6,073 3,839 297
Total	9,889	9,488	8,573	6,878	7,334	8,109	8,419	8,935	8,777	9,508	8,817	10,209

PER CAPITA PRODUCTION OF MINES IN THE PROVINCE.

Year	Gross Tons of Coal Mined	Total No. of Men Employed	Tons of Coal Mined Per Man	No. of Men Employed Underground	Tons of Coal Mined per Man Employed Underground
1906	1,385,000	2,800	494	2,000	692
1907	1.834.745	3,600	509	2,700	679
1908	1,845,000	3,780	488	2,681	688
*1909	2,174,329	5,207	417	3,893	566
1910	3,036,757	5,818	504	4,090	742
**1911	1,694,564	6,689	253	4,517	375
1912	3,446,349	6,661	517	4,861	708
1913	4,306,346	8,068	533	5,837	737
1914	3,821,739	8,170	467	6,052	631
1915	3,434,891	6,445	532	4,493	764
1916	4,648,604	7,570	614	5,536	839
**1917	4,863,414	8,310	595	6,047	804
1918	6,148,620	8,818	697	6,141	1,001

- *During the year 1909 a strike affecting all the larger mines in the Province lasted for a period of three months.
- **During the year 1911 a strike affecting all the larger mines in the Province lasted for a period of eight months.
- ***During the year 1917 a strike affecting all the larger mines in the Province lasted for a period of three months.

PER CAPITA PRODUCTION OF MINES IN THE DOMESTIC COAL FIELD.

Year	Gross Tons of Coal Mined	No. of Men Employed Underground	Total No. of Men Employed	Tons of Coal Mined per Man Employed Underground	Tons of Coal Mined per Man Employed
1910	878,011	1,676	2,307	524	380
1911	964,700	2,488	3,548	391	271
1912	1,341,389	2,283	2,980	587	450
1913	1,763,225	2,929	4,017	601	438
1914	1,697,401	3,190	4,219	532	402
1915	1,682,922	2,210	3,181	761	529
1916	2,172,801	3,137	4,132	692	525
1917	2,537,829	3,489	4,701	727	539
1918	3,035,061	3,420	4,896	887	619

PER CAPITA PRODUCTION OF MINES IN THE BITUMINOUS COAL FIELD.

Year	Gross Tons of Coal Mined	No. of Men Employed Underground	Total No. of Men Employed	Tons of Coal Mined per Man Employed Underground	Tons of Coal Mined per Man Employed
1910	1,896,961	2,076	2,981	914	636
1911	649.745	1,820	2,641	357	246
1912	1.926,371	2,353	3,243	818	594
1913	2,374,401	2,645	3,562	897	666
1914	1,953,367	2,632	3,529	742	553
1915	1,626,237	2,103	2,921	773	557
1916	2,335,259	2,258	3,142	1,034	743
1917	2,206,868	2,429	3,335	909	661
1918	2,982,334	2,597	3,636	1,109	820

PER CAPITA PRODUCTION OF MINES IN THE ANTHRACITE COAL FIELD.

Year	Gross Tons of Coal Mined	No. of Men Employed Underground	Total No. of Men Employed	Tons of Coal Mined per Man Employed Underground	Tons of Coal Mine Per Mar Employe
1910	261,785	338	530	774	493
1911	80.119	209	500	383	160
1912	178,589	225	438	793	407
1913	168,720	263	489	641	345
1914	170,971	230	422	743	405
1915	125,732	180	343	698	366
1916	140.544	141	296	996	474
1917	118,717	129	284	920	418
1918	131,225	124	286	1,058	458

The tables showing the number of men employed in the Bituminous Coal Field include employees at the Coke Ovens, and in the Anthracite Coal Field employees at the Briqueting Plant.

PER CAPITA PRODUCTION OF MINES IN THE DOMESTIC COAL FIELD BY DISTRICTS.

Districts	Gross Tons of Coal Mined	No. of Men Employed Undergr'nd	Total No. of Men Employed	Tons of Coal Mined Per Man Employed Undergr'nd	Tons of Coal Mined Per Man Employed
Pincher Creek	3,955	12	14	329	282
Lethbridge	857,092	1.001	1,429	856	599
Magrath		3	3	542	542
Milk River	6.848	27	33	978	207
Taber		272	359	674	511
Bow Island	7.283	19	20	383	364
Medicine Hat	19.028	27	36	704	528
Aldersyde	8,069	18	19	448	424
High River		2	3	285	190
Drumheller	881,081	1,009	1.451	873	607
Big Valley	_, .	36	49	964	708
Brooks	9,783	16	18	611	543
Hanna	29,533	37	53	798	557
Lacombe	15,201	30	35	506	434
Trochu	18,248	25	39	729	467
Three Hills	30,150	43	54	701	558
Carbon	5,431	15	16	362	339
Battle River	12,203	19	20	642	610
Camrose	56,597	49	85	1,155	665
Tofield	66,054	-3	76	22,018	869
Clover Bar	264,868	298	396	888	668
Edmonton	106,756	159	208	671	513
Namao	21,660	29	39	746	555
Cardiff	266,142	166	277	1,602	599
Wabamun	19,250	25	39	770	493
Pembina	109,429	80	125	1,367	875
Peace River					
Total	3,035,061	3,420	4,896	887	619

PER CAPITA PRODUCTION OF MINES IN THE BITUMINOUS COAL FIELD BY DISTRICTS.

Districts	Gross Tons of Coal Mined	No. of Men Employed Undergr'nd	Total No. of Men Employed	Tons of Coal Mined Per Man Employed Undergr'nd	Tons of Coal Mined Per Man Employed
Crow's Nest Pass	1,601,486	1,305	1,799	1,226	376
Canmore	274,709	202	312	1.359	874
Brazeau	371,562	320	429	1,161	866
Jasper Park	283,342	395	487	717	581
Yellowhead Pass	195,972	182	314	1,076	624
Mountain Park	255,263	193	295	1,322	865
Total	2,982,334	2,597	- 3,636	1,109	820

PER CAPITA PRODUCTION OF MINES IN THE ANTHRACITE COAL FIELD BY DISTRICTS.

	District	Gross Tons of Coal Mined	No. of Men Employed Undergr'nd	Total No. of Men Employed	Tons of Coal Mined Per Man Employed Undergr'nd	Tons of Coal Mined Per Man Employed
Banff		131,225	124	286	1,058	458

The following table shows the number of days in each month on which DOMESTIC Coal was drawn:

Total.	187 248 2148 205 205 197 197 198 238 239 239 239 239 234 234 234 234	28.9
Dec.	2228128884127450277736777777777777777777777777777777777	17.8
Nov.	2,23 2,23 2,23 2,23 2,23 2,23 2,23 2,23	90%
Oct.	22 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	919
Sept.	222 222 223 223 223 233 233 233 233 233	18.9
Aug.	25222222222222222222222222222222222222	76
July	200 200 200 200 200 200 200 200 200 200	18.9
June	20 20 20 20 20 20 20 20 20 20 20 20 20 2	17.9
May	012 113 120 120 130 140 150 160 170 170 170 170 170 170 170 170 170 17	17.1
April	1022141 4 2 1 1 2 2 2 1 1 1 2 2 2 1 1 1 2 2 2 1 1 1 2 2 2 1 1 1 2 2 2 2 1 1 1 1 2 2 2 2 1 1 1 1 2 2 2 2 2 1 1 1 1 1 2	14
Mar.	2012 2012 2012 2012 2012 2012 2012 2012	15.7
Feb.	23.12.23.13.23.23.13.23.23.23.23.23.23.23.23.23.23.23.23.23	19
Jan.	22 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	21
District	۱۱۱۱۱۱۱۱۱۱۱۱۱۱۱۱۱۱۱۱۱۱۱۱۱۱۱۱۱۱۱۱۱۱۱۱	Average No. of days worked

The following table shows the number of days in each menth on which BITUMINOUS Coal was drawn:

District	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Crow's N. Pass Canmore Brazeau Jasper Park Yellowhead Pass	2 2 2 2 2 2 5 2 4 2 7 7	22 11 11 13 23	222222	2 2 2 2 2 2 4 2 2 4 4 4 4 4 4 4 4 4 4 4	25 24 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	22 22 23 25 25 25	26 26 19 20 25 26	26 25 24 23 23 23	22 2 2 2 2 2 2 2 2 3 2 2 2 3 3 2 2 4 4 4 3 3 3 3	25 25 25 25 25 25 25 25 25 25 25 25 25 2	25 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	22 21 22 23 23 23 23 23	295 268 271 274 271 290
Average No. of days worked	24.6	20.8	23.1	22.1	22.5	23.0	23.6	24.8	23.8	25.1	22.3	22.0	23.9

The following table shows the number of days in each month on which ANTHRACITE Coal was drawn:

	Total.	154
tawn.	Dec.	12
was c	Nov.	10
ACITE COS	Oct.	13
CTATIT	Sept.	12
I'MS THE HUMBER OF GAST III CACH MORE AND THINK CLITIC COAL WAS CLAWN.	Aug.	13
M DIL WI	July	13
Ten mon	June	13
. days III cacii III	May	13
ner or m	April	14
nne nam	Mar.	14
	Feb.	14
ing table sil	Jan.	13
The londwing table sin	District	Banff

The following table shows the amount of mine timber used during the year:

DOMESTIC COAL FIELD.

Districts	Round Timber Lineal Feet	Square Timber Square Feet B. M.	Slabs Cords	Cordwood No. of Cords
Pincher Creek	23,076	}]	
Lethbridge	3,893,985	3,182,119	135	1,667
Magrath	8,000			
Milk River	24,939	933		
Taber	543,002	28.363		
Bow Island	15,818	300		(
Medicine Hat	41,845			
Aldersyde	35,152	7,804		
High River	6,623			
Drumheller	1,551,465			
Big Valley	76,254	1		}
Brooks	45,500	160		
Hanna	44,978			
Lacombe	53,388		60	
Trochu	54,984			
Three Hills	63,280			
Carbon	9,770			
Battle River	21,570		t	
Camrose	155,800			
Tofield	7,000			
Clover Bar	781.074			
Edmonton	422,240	\		
Namao	118,506			
Cardiff	109,188			
Wabamun	64,600			
Pembina	387,622			{
Peace River				
Total	8,559,659	3,229,679	195	1,667

BITUMINOUS COAL FIELD.

Districts	Round Timber Lineal Feet	Square Timber Square Feet B. M.	Lagging	Cordwood No. of Cords
Crow's Nest Pass	2,655,993 192,076	1,040,049		
Brazeau	1,056,564			1,529
Jasper Park	580,400	[
Yellowhead Pass]	378,060		3,800	
Mountain Park	1,109,534		400,000	
Total	5,972,627	1,040,049	403,800	1,529

ANTHRACITE COAL FIELD.

District	Round Timber Lineal Feet	Square Timber Square Feet B. M.	Slabs Cords	Cordwood No. of Cords
Banff	152,132			580

EXPLOSIVES.

The following table shows the quantity of Explosives used in pounds for blasting coal in the DOMESTIC Coal Field:

		NAI	ME OF E	XPLOSIVE	Ç		
Districts	Monobel No. 1	Black Powder	Polar Permi- tite	Dyna- mite	Stump- ing Powder	Viking No. 1	Tota1
Pincher Creek	185	450	1,162				1,797
Lethbridge		77,504	1,102	20,409		15,033	140,107
Magrath				1		1 ' !	740
Milk River		5.890					6.263
Taber		55,900		1		~~~~	56,100
Bow Island		5,141		1	J	J 1	5,141
Medicine Hat		13,950					14,250
Aldomardo			1	1	1		
Aldersyde		2,535	,]		2,535
High River		001 000					50
Drumheller		231,862		}			267,594
Big Valley			i	<u>-</u> -			1,500
Brooks			J	J	,]	6,733
Hanna				[15,243
Lacombe			1~			~	3,288
Trochu		8,025]			8,025
Three Hills		14,558					14,558
Carbon		4,015					4,015
Battle River		20	[20
Camrose	100	50	l			li	150
Tofield	1.875			1,050	700		3.625
Clover Bar	7,480	39,956	l	(i	900	iI	48,336
Edmonton	13,119	8,015	650				21,784
Namao	50	25					75
Cardiff	19,218	52.000					71.218
Wabamun :	407	0=,000					407
Pembina						50	17.071
Peace River						30	11,011
Total		544,862	1,812	22,235	1,600	15,083	710,625

The following table shows the quantity of Explosives used in pounds for blasting coal in the BITUMINOUS Coal Field:

		NAN	IE OF E	XPLOSIVE	C .		
Districts	Monobel No. 1	Polar Permi- tite	Dyna- mite	Viking No. 1	Dynobel No. 2		Tota1
Crow's N. Pass	65,676	16,117			101,839		183,632
Canmore	10,920]		45,500			56,420
Brazeau	4,500						4,500
Jasper Park	16,645	230		4,300		[21,175
Yellowhead Pass	48,399	531		4,100	3,352		56,382
Mountain Park -	26,402	650			- 		27,052
Total	172,542	17,528		53,900	105,191		349,161

The following table shows the quantity of Explosives used in pounds for blasting coal in the Anthracite Coal Field:

			NAME OF EXPLOSIVE	
-	District	Monobel No. 1		Total
Banff		29,850		29,850

The following table shows the number of tons of DOMESTIC coal produced per pound of explosive used for blasting coal:

Districts	No. of Tons Mined	No. of Lbs. of Explosives U: ed	Tons of ('oal Mined Per Lb. of Explosive Used
Pincher Creek	3,955	1,797	2.2
Lethbridge	857,092	140,107	6.0
Magrath	1,627	740	2,2
Milk River	6,848	6,263	1.1
Taber	183,485	56,100	3.3
Bow Island	7.283	5.141	1.4
Medicine Hat	19,028	14,250	1.3
Aldersyde	8,069	2,535	3.1
High River	570	50	11.4
Drumheller	881,081	267,594	3.2
Big Valley	34,718	1,500	23.1
Brooks	9,783	6,733	1.5
Hanna	29,533	15.243	1.9
Lacombe	15,201	3,288	4.6
Trochu	18,248	8.025	2.2
Three Hills	30,150	14,558	2.0
Carbon	5,431	4.015	1.3
Battle River	12,203	20	610.1
Camrose	56,597	150	377.3
Tofield	66,054	3,625	15.4
Clover Bar	234,863	48,336	5.5
Edmonton	106,756	21.784	4.9
Namao	21,660	75	288.8
Cardiff	266,142	71,218	3.7
Wabamun	19,250	407	47.3
Pembina	109,429	17,071	6.4
Peace River			
Total	3,035,061	710,625	4.3

The following table shows the number of tons of BITUMINOUS coal produced per pound of explosive used for blasting coal:

Districts	No. of Tons Mined	No. of 1,bs. of Explosives Used	Tons of Coal Mined Per Lb. of Explosive Used
Crow's Nest Pass Canmore Brazeau Jasper Park Yellowhead Pass Mountain Park	1,601,486 274,709 371,562 283,342 195,972 255,263	183,632 56,420 4,500 21,175 56,382 27,052	8.7 4.8 82.5 13.4 3.4 9.4
Total	2,982,334	349,161	8.5

The following table shows the number of tons of ANTHRACITE coal produced per pound of explosive used for blasting coal:

District	No. of Tons Mined	No. of Lbs. of Explosives Used	Tons of Coal Mined Per I.b. of Explosive Used
Banff	131,225	29,850	4.4

Estimated number of shots fired for blasting coal in the DOMESTIC Coal Field:

Districts	Squibs	Fuse	Electric Detonator	Electric Squib	Tota1
Pincher Creek	560	5,854			6,414
Lethbridge	36,639	20,411	75,092	34,000	166,142
Magrath	1,270	{	.[li	1,270
Milk River	7,431	961		[[8,392
Taber	55,000	670	Ì		55,670
Bow Island	6,240	[6,240
Medicine Hat	9,030	215	40		9,285
Aldersyde	6,875				6,875
High River		43			43
Drumheller	7,180	44,448	45,451		97,079
Big Valley		206	(206
Brooks	6,450	10			6,460
Hanna		15,407	Í		15,407
Lacombe	664	1,482			2,146
Trochu	6,085	5,259			11,344
Three Hills	1,190	3,987			5,177
Carbon	3,490	500			3,990
Battle River		10			10
Camrose		100	100		200
Tofield		2,720			2,720
Clover Bar		24,997	10,741		35,738
Edmonton		4,831	25,542		30,373
Namao		190	[190
Cardiff		59,519	160		59,679
Wabamun		300			300
Pembina			15,396		15,396
Peace River					
Total	148,104	192,120	172,522	34,000	546,746

Estimated number of shots fired for blasting coal in the $BITU\mbox{-}$ MINOUS Coal Field:

Districts	Squibs	Fuse	Electric Detonator		Total
Crow's Nest Pass Canmore Brazeau Jasper Park Yellowhead Pass Mountain Park		440 6,760 	214,513 55,000 2,012 32,505 35,357 42,533		214,513 55,440 8,772 32,505 36,457 42,533
Total		8,300	381,920		390,220

Estimated number of shots fired for blasting coal in the ANTH-RACITE Coal Field:

	District		Electric Detonator	Total
Banff		 	30,547	 30,547

Number of Miss-Fire Shots recorded in blasting coal in the DOMESTIC Coal Field:

		METH	OD OF SHOT-F	TRING	
Districts	Squib	Fuse	Electric Detonator	Electric Squib	Tota1
Pincher Creek	3	3			6
Lethbridge	9	8	67	350	434
Magrath	2				2
Milk River	93		.li		93
Taber		2			2
Bow Island	1		. !		1
Medicine Hat	6				6
Aldersyde	101				101
High River		2			2
Drumheller		56			56
Big Valley					
Brooks					
Hanna	12	10			22
Lacombe					
Trochu		188			202
Three Hills	25		1 1		25
Carbon					
Battle River					
Camrose					
Tofield					
Clover Bar					12
Edmonton			16		21
Namao	,				
Cardiff					51
Wabamun		3	[3
Pembina		ŭ	27		27
Peace River			-		
Total	266	340	110	350	1,066

Number of Miss-Fire Shots recorded in blasting coal in the BITUMINOUS Coal Field:

<u> </u>	METHOD OF SHOT-FIRING					
Districts	Fuse	Electric Detonator		Total		
Crow's Nest Pass Canmore		222 46 4 3 11 36		222 46 18 3 11 36		
Total	14	322		336		

Number of Miss-Fire Shots recorded in blasting coal in the ANTHRACITE Coal Field:

•		метног	OF SHOT-F	TRING	
	District		Electric Detonator		Total
Banff		 	22		22

The following table shows the quantity of explosives used in pounds for blasting rock in Coal Mines in the Province:

	NAME OF EXPLOSIVE						
Districts	30% Dyna- mite	60% Dyna- mite	Black Powder	Monobel No. 1	Polar Permi- tite	Tota	
Crow's Nest Pass	101				11,459	11,560	
Pincher Creek	2			25	370	397	
Lethbridge	1,379	l	45			1,424	
Magrath			[[[
Milk River	50					50	
Taber	1,990	1	525	25	60	2,600	
Bow Island	52	Í	40	'		92	
Medicine Hat	100	[[[ii 100	
Aldersyde	20			145		165	
High River	344	1	(l	15		359	
Canmore		1,500	360		10,000	11,860	
Banff			1		26,650	26,650	
Drumheller	[Í	li	5.233		5,233	
Big Valley							
Brazeau				600	658	1,258	
Brooks	3	·				3	
Hanna	200		30			230	
Lacombe							
Trochu						2.000	
Carbon			2			2	
Battle River						\ _	
,							
Tofield							
Clover Bar				572		572	
Edmonton				112	100	212	
Namao				48	200	48	
Cardiff		,	,	10		1	
Wabamun						ļ	
Pembina						}	
Jasper Park	590				6,955	7,545	
Yellowhead Pass	40				3,300	3,340	
Mountain Park	1.080				235	1,315	
Peace River							
Total	7,951	1,500	1,002	6,775	59,787	77,015	

Estimated number of Shots fired for blasting rock in Coal Mines in the Province:

Districts	Electric Detonator	Electric Squib	Fuse	Squib	Total
Crows Nest Pass			284		10,382
Pincher Creek				850	850
Lethbridge	570)	1,206) 30 j	1,806
Magrath			[[[
Milk River			40		40
Taber]	2,655	470	3,170
Bow Island		[141	65	206
Medicine Hat			430		430
Aldersyde			215		215
High River		[765		765
Canmore	10,000]	534		10,534
Banff	19,553	[1		19,553
Drumheller	4,266	Í			4,266
Big Valley			ĺ		
Brazeau	922	Ì	1,575		2,497
Brooks			95		95
Hanna	[1		30	30
Lacombe					
Trochu		Ì	700		700
Three Hills	'	[
Carbon		Ì	1	5	5
Battle River[Í		
Camrose					-
rofield					
Clover Bar	934		182		1,116
Edmonton	123		180		303
Namao	60		1		60
Cardiff					
Wabamun]	15		15
Pembina					
Jasper Park			5,295		11.985
Yellowhead Pass	2,990				2,990
Mountain Park			500		1,051
Peace River					
Total	56,802		14,812	1,450	73,064

The following table gives the number of Miss-Fire Shots recorded in blasting rock in Coal Mines in the Province:

			<u> </u>		
Districts	Electric Detonator	Electric Squib	Fuse	Squib	Total
Crows Nest Pass	8	 			8
Pincher Creek				/	-
Lethbridge					
Magrath					
Milk River					2
Taber			7		10
Bow Island	_	 	<i>}</i>	}	}
Medicine Hat					
Aldersyde					
High River			6		6
Canmore			2		5
Banff]			17
Drumheller		ļ]]	46
Big Valley					
Brazeau					6
Brooks			2		2
Hanna]	1	1		1
Lacombe			[
Trochu				40	40
Three Hills			1		
Carbon					Î
Battle River	 	t			
Camrose					
Tofield)	1			
Clover Bar	5			[5
Edmonton					
Namao					
Cardiff					
Wabamun					
Pembina					
Jasper Park					
Yellowhead Pass	2				9
Mountain Park					
Peace River					
reace River					
Total	90		20	40	150

No statistics are available as to the cause of miss-fires.

ELECTRICITY.

The Rules for the Installation and Use of Electricity in or about mines require a return to be made to the Department on or before January 21st of each year, giving size, type and any other particulars which may be required of electrical apparatus in use above and below ground. According to the returns received from the different mines, electricity was used at 40 mines in 1918. A summary of these returns regarding the horse-power of electrical apparatus in use is given below:

	No. of Mines		of Electrical is in Use	Total
District	Using Electricity	Above Ground	Below Ground	Horse-Power
Crow's Nest Pass		2,958	365	3,323
Pincher Creek				
Lethbridge	1 - 1	938	340	1,278
Magrath				
Milk River				
Taber	, - ,	115	343	458
Bow Island				
Medicine Hat		7		7
Aldersyde				
High River				
Canmore	1 1	315		315
Banff	1 1	150		150
Drumheller] 7)	500	250	750
Big Valley				
Brazeau	1)	445		445
Brooks				
Hanna Lacombe				
m .				
FTT				
Carbon				
Battle River				
Camrose	1	12	3	15
Tofield	}.	12		10
Clover Bar	2	55	101	156
Edmonton	1 1	37	30	67
Namao	1 1		30	
Cardiff	2		150	150
Wabamun	ī	171/2	100	181/2
Pembina	$\hat{1}$	118	301	419
Jasper Park	2	307	002	307
Yellowhead Pass	3 1	445	321/2	4771/2
Mountain Park	2	115	55	170
Peace River				
Total	40	6,5341/2	1,9711/2	8,506

A closer estimate of the extent to which electricity is used in the different districts may be made by considering the number of tons of coal raised per electrical horse-power employed in all mines under The Mines Act. The following table will give this information:

TONS OF COAL PER ELECTRICAL HORSE-POWER EMPLOYED.

District	Tons of Coal Mined in 1918	Above Ground	Below Ground	Total Above and Below Ground
Crow's Nest Pass	1,601,486	541	4,387	481
Pincher Creek	3,955			
Lethbridge	857,092	913	2,520	670
Magrath	1,627		[[
Milk River	6,848			Í
Taber	183,485	1,595	337	400
Bow Island	7,283	[
Medicine Hat	19,028	2,718		2,718
Aldersyde	8,069	[
High River	570			
Canmore	274,709	872		872
Banff	131,225	874		874
Drumheller	881,081	1,762	3,524	1,175
Big Valley	34,718	Í		
Brazeau	371,562	834		834
Brooks	9,783			
Hanna	29,533	[
Lacombe	15,201			
Trochu	18,248			
Three Hills	30,150			
Carbon	5,431			
Battle River	12,203			
Camrose	56,597	4,716	18,865	3,773
Tofield	66,054	[
Clover Bar	264,868	4,814	2,622	1,697
Edmonton	106,756	2,885	3,557	1,593
Namao	21,660	li		
Cardiff	266.142		1.774	1,774
Wabamun	19,250	1,100	19,250	1,040
Pembina	109,429	936	363	261
Jasper Park	283,342	923		923
Yellowhead Pass	195,972	440	60,029	410
Mountain Park	255,263	222	4,641	963
Peace River		l i		

This table is useful to show by comparison with other years the growth or decline in the use of electricity in the Province as a whole and in each district taken separately.

The number of electrically driven coal-cutting machines in use at the end of the year was twenty-four.

No accidents were reported in connection with the use of electricity during the year.

COAL-CUTTING MACHINERY.

District	No. of Coa Machines C	al-cutting Operated by	Tons of Coal Mined by	
2	Electricity	Compressed Air	Electricity	Compressed
Crow's Nest Pass				
Pincher Creek				
Lethbridge		103		629,947
Magrath				
Milk River			l	l
Taber	1 '	37	14,960	135,408
Bow Island		/	ĺ	
Medicine Hat	2	3		6,857
Aldersyde		'		
High River				
Canmore				
Banff				Ì
Drumheller	8 '	24	214,899	317,750
Big Valley	'l	'	l	
Brazeau			}	\
Brooks			1	
Hanna				
Lacombe				
Frochu] 2	1	5,214
Three Hills		4		24,984
Carbon				
Battle River				
Camrose			Í	
rofield				
Clover Bar	3	6	56,000	70,000
Edmontonl		7	li	54,510
Namao			1	
Cardiff	5		146,612	
Wabamun				
Pembina	5		108,909	
Jasper Park				
Yellowhead Pass		7 1		83,796
Mountain Park	J			
Peace River				
Total	24	193	541,380	1,328,466

The following tables are taken from reports issued by the Department of Mines, Ottawa. It will be noted, however, that the amount of coal stated in these tables as being produced each year differs slightly from the amount shown by the provincial reports. The particulars for the year 1918 have not yet been received.

ANNUAL PRODUCTION OF COAL IN ALBERTA.

Calendar Year	Short Tons	Value	Average Per Tor
1887	74,152	\$ 157,577	\$2.13
1888	115,124	183,354	1.59
1889	97,364	179,640	1.85
1890	128,753	198,298	1.54
1891	174,131	437,243	2.51
1892	178,970	460,605	2.57
1893	230,070	586,260	2.55
1894	184,940	473,827	2.56
1895	169,885	382,526	2.25
1896	209,162	581,832	2.78
1897	242,163	630,408	2.60
1898	315,088	788,720	2.50
1899	309,600	774,000	2.50
1900	311,450	778,625	2.50
1901	340,275	850,687	2.50
1902	402,819	960,601	2.38
1903	495,893	1,117,541	2.25
1904	661,732	1,404,524	2.12
1905	931,917	1,993,915	2.14
1906	1,246,360	2,614,762	2.10
1907	1,591,579	3,826,286	2.41
1908	1,685,661	4,127,311	2.45
1909	1,994,741	4,838,109	2.43
1910	2,894,469	7,065,736	2.44
1911	1,511,036	3,979,264	2.63
1912	3,240,577	8,113,525	2.50
1913	4,014,755	10,418,941	2.59
1914	3,683,015	9,350,392	2.54
1915	3,360,818	8,283,079	2.46
1916	4,559,054	11,386,577	2.50
1917	4,736,368	14,153,685	2.99

MINERAL PRODUCTION IN ALBERTA, 1916 AND 1917

	19	16	19.	17
Product	Quantity	Value	Quantity	Value
Gold (ozs.)	82	\$ 1,695		\$
Coal (tons)	4,559,054	11,386,577	4,736,368	14,153,685
Natural Gas (M. cu. ft)	6,904,231	1,113,296	6,744,130	1,299,976
Petroleum (bbls.)			8,500	63,302
Cement (bbls.)	275,727	477,832	259,423	567,969
Clay Products		255,140	Í	309,991
Lime (bus.)	78,019	20,033	104,540	35,516
Sand-line Brick (No.)	697,500	5,571	1,547,590	15,703
Stone		257		7,482
*Other Products		67,142		73,911
Total Value		\$13,297,543		\$16,527,535

^{*}Includes in 1917 a small value in copper, zinc and silver in addition to sand and gravel.

ACCIDENTS.

Summary table showing Accidents occurring in Mines during 1906 to 1918 inclusive:

Year	Output		Accidents	•	Tons of (loal Mined Per	Accident;
	Julian	Fatal	Serious	Slight	Fatal	Serious	Slight
1906	1,385,000	10	11	20	138,500	125,909	69,250
1907	1,834,745	19	18	18	96,565	101,930	26,981
1908	1,845,000	11	38	13	167,727	48,552	141,923
1909	2,174,329	9	42	18	241.952	51.769	120,796
1910	3,036,757	61*	41	58	49,782	71,067	52,375
1911	1,694,564	7	32	45	242,080	52,955	37,656
1912	3,446,349	21	38	58	164,111	90,693	59,419
1913	4,306,346	28	60	83	152,789	71,772	51,883
1914	3,821,729	209**	44	50	18.286	86,857	76,434
1915	3,434,891	18	33	33	190.827	104,087	104,087
1916	4,648,604	20	51	34	232,430	91.149	136.723
1917	4,863,414	24	62	39	202,642	78,442	124,703
1918	6,148,620	22	60	77	279,483	102,477	79,860
Total	42,640,358	459	530	596	92.811	80,453	71.544

*Including thirty-one deaths caused by the Bellevue explosion.

**Including one hundred and eighty-nine deaths caused by the Hillerest explosion.

Table showing Accidents during 1918 classified according to the coal field in which they occurred:

	Output		Accidents	3	Tons of Co	al Mined Per	Accident
		Fatal	Serious	Slight	Fatal	Serious	Slight
Domestic	3,035,061	 5	$\begin{vmatrix} 26 \end{vmatrix}$	39	607,012	124,425	[77,822
Bituminous _[Anthracite	2.982,334 $131,225$	17	34	38	175,431	87,716	78,482

Classification of accidents according to outputs of mines which produced during the year 1918:

	Under 10.000 tons	From 10,000 to 50,000 tons	From 50,000 to 100,000 tons	From 100,000 to 200,000 tons	From 200.000 to 300.000 tons	From 300,000 to 400,000 tons	From 400.000 to 500,000 tons	Total
Fatal Serious Slight	$\frac{1}{2}$	3 11 19	5 11 17	6 9 11	4 14 17	8 7	3 5 3	22 60 77

Table showing accidents per ton of coal extracted from mines which produced during 1918:

	Under 10,000 tons	From 10.000 to 50.000 tons	From 50,000 to 100,000 tons	From 100.000 to 200.000 tons	From 200,000 to 300,000 tons	From 300,000 to 400.000 tons	From 400.000 to 500.000 tons
Fatal	223,233	261,271	222,994	189,118	265,914		144,954
Serious	111,616	71,256	101,361	126,078	96,952	131,422	86,972
Slight	74,411	41,253	65,587	103,155	79,842	150,197	144,954
Total	37,205	23,752	33,787	43,642	38.781	70.092	39,533

The following tables show the number of tons produced per accident:

DOMESTIC COAL MINES.

	1	No of	No. of	Tons Prod	uced Per Ac	cident
Districts	Output	Men Empl'd	Fata1	Serious	Slight	Total
Pincher Creek	3,955	14				
Lethbridge	857.092	1.429	285,697	171.418	107,124	53,568
Magrath	1,627	3		111,110	101,121	55,500
Milk River	6,848	33				
Taber	183,485	359		 	91,747	91.747
Bow Island	7,283	20			7,283	7,283
Medicine Hat	19,028	36			19,028	
Aldersyde	8,069	19			19,020	19,028
High River	570	3				
_ ~		-		145 190	C9 094	44.054
	881,081	1,451		, .	62,934	44,054
Big Valley	34,718	49				
Brooks	9,783	18		90.500		00 500
Hanna	29,533	53		1,	15.001	29,533
Lacombe	15,201	35		J	15,201	15,201
Trochu	18,248	39	[[
Three Hills	30,150	54		30,150	30,150	15,075
Carbon	5,431	16]	<u> </u>	5,431	5,431
Battle River	12,203	20	1.1			
Camrose	56,597	85		56,597		56,597
Tofield	66,054	· 76	[[Í
Clover Bar	264,868	396		52,973	88,289	33,108
Edmonton	106,756	208		58,378	31,351	15,251
Namao	21,660	39	'/	10,830	21,660	7,220
Cardiff	266,142	277	133,071	133,071	266,142	53,228
Wabamun	19.250	39	//	l	Í	İ
Pembina	109,429	125		109,429		109,429
Peace River		[
Total	3,035,061	4,896	607,012	116,733	77,822	43,358
	<u> </u>			1	1	1
	BITUM	INOUS C	OAL MIN	ES.		
Crow's Nest Pass	1,601.486	1,799	 228,784	160,148	177,943	61,595
Canmore	274,709	312	274,709	30,523	19,622	11,446
Brazeau	1	429		61,927	371,562	53,080
Jasper Park		487	56,668	141,671	283,342	35,418
Yellowhead Pass		314	97,986	32,662	16.331	9,799
Mountain Park		295	127,631	255,263	255,263	63,815
Total	2,982,334	3,636	175,431	87,712	78,482	33,509
	ANTHI	RACITE (COAL MIN	NES.	1	1
Banff	131,225					
,	1	1	11	1	1	1

LIST OF ACCIDENTS WHICH HAVE OCCURRED IN THE DOMESTIC FIELD DURING 1918.

ДАТЕ	MINE	МАЖЕ	AGE	Occupation	DETAILS
Jan.	Cardiff Collieries, Ltd	George Cook	53	Pumpman	He was pushing the centre car of a
Jan.	4 Canadian Pacific Railway Co., No. 6 Mine, Lethbridge	St. Wolosezuk	23	Coal-loader	trip of three cars and was crushed between the coal rib and side of car. Injury to pelvis and bladder, from which he died on Jan. 5, 1918. He was going home from work and was riding on a trip of loaded coal
					cars on the railroad from No. 6 mine and jumped off the train while it was in motion, falling with his left arm under the loaded cars.
Jan.	5 Canadian Pacific Railway Co., No. 6 Mine, Lethbridge	John Chumik	46	Night-cager	badly crushing the arm which had to be amputated above the elbow. He was on the cage which was hoist-
	,				ed from surface landing to the tipple and struck his head against the side of the cage. Bruised about
Jan. 7	Twin City Coal Co., Ltd.	E. Halbach	29	Machine-runner	chest and scalp wound. He was operating a coal cutting
Jan. 8	The Western Commercial Co., Ltd	Steve Glavis	33	Miner	machine when a piece of rock fell from the roof striking him on tha leg. Fractured right leg. He was taking down cap-rock when a
Jan. 11	11 Redcliff Brick & Coal Co., Ltd.	Alfred Womersley	35	Miner	nigger-head which was in the roof fell on him scratching and bruising him on breast and legs. He was loading a car when a niece of
					cap rock fell from the roof striking him on the left shoulder, side and ankle. Badly bruised shoulder, side and ankle.

THE MINES BRANCH

00		1	HE MINES DIAN	O.A.		
	Details	He had been delivering lunch pails to men working at this mine and had been sent home. He was not seen again until found with his right hand badly crushed, having been caught in driving gear of slack conveyor. Hand crushed, necessitating amputation of four fingers.	He had lit a shot on each side of his room and it is presumed the squib in the one on the left side went out and that he had gone back to relight it, and before he got back to the crosscut the shot on the right side exploded. Cuts on back of neck.	Spark from light fell in powder car, burnt about face and hands.	Struck by flying coal from a shot, scalp wounds on face and head and	bruises on body. Was jacking up his machine when the jack slipped, allowing the machine to fall, catching his hand between the machine and rail, three fingers on right hand smashed, necessitating amputation of third finger at first joint.
ELD—Continued.	Occupation	Not employed	Loader	Loader	Miner	Machine-runner
ic Fn	AGE	∞	30	1	35	਼
LIST OF ACCIDENTS IN DOMESTIC FIELD—Continued.	NAME	Freddy Chadderton -	Chris Lokitch	Otto Grouch	Fred Lind	Jacob Luoma
List of A	Mine	12 Sterling Coal Co., Ltd	16 Canada West Coal Co., Ltd	16 Guthro & Barr	22 The Ellis Coal Co., Ltd.	26 Cardiff Collieries, Ltd
	DATE	Jan. 12	Jan. 16	Jan. 16	Jan. 22	Jan. 26
	-	rg	S.	, s	Ja	E .

LIST OF ACCIDENTS IN DOMESTIC FIELD—Continued.

DETAILS	He was attempting to couple a moving trip of empty cars to an empty car that was standing on the curve of No. 4 northwest face entry, when the cars bumper locked and derailed one which struck him on the leg, breaking his leg.	He had just entered the mine, and had put his tools down and was turning around when his eye came in contact with an auger in the	hands of a fellow workman, resulting in injuries to the eye so that it had to be removed. He was working in the last cross-cut off No. 6 face entry southwest when a piece of coal fell from the rib	on right leg. He slipped and fell between two empty cars, which were returning from the kickback to the cage, from the kickback to the cage, from the him fractured collar.	••• 💆	about the chest. A lump of clay rolled on him, dislocating his shoulder.
Occupation	Rollerman	Machine Helper	Coal-loader	Tipple foreman	Pusher	Miner
AGE	24	24	35	37	31	35
NAME	Albert Binda	Peter Misenacrick	Fred Kosyelek	James C. Barclay	Guss Frederick	Karl Hedbery
MINE	28 Canadian Pacific Railway Co., No. 6 Mine, Lethbridge	The Ellis Coal Co., Ltd	8 Canadian Pacific Railway Co., No. 6 Mine. Lethbridge	21 Canadian Pacific Railway Co., No. 6 Mine Lethbridge	5 МсРеак Coal Co	23 Knee Hill Coal Company
DATE	Jan. 28	Feb. 2	Feb. 8	Feb. 21	Mar. 5	Mar. 23

LIST OF ACCIDENTS IN DOMESTIC FIELD—Continued.

DATE	MINE	NAME	AGE	Оссиратіом	Details
April	8 McPeak Coal Co	Steve Denytry	28	Miner	A piece of clay fell from the roof on
April 2	April 26 Canadian Pacific Railway, No. 3 Mine, Leth- bridge	A. Campbell	31	TimbermanTimberman	They were engaged in repairing a pipe in a borehole from the surface, and had been working two and a
				-	half hours when some gas was ignited at their open lights. Campbell was slightly burned on ears and nose, Moore burned on hands and neck.
April 2	April 26 Alberta Coal Mining Co., Ltd	Andrew Denysiuk	45	Miner	He had ignited the fuse to fire two shots and had returned to the face before the second shot exploded, with the result that he was struck by Ilying coal. Death occurred on the morning of the 27th April from shock and injuries received.
April 2	April 27 Union Collieries, Ltd	John Dymnisky	24	Driver	He was found lying unconscious on the track in No. 6 entry, bleeding from a wound in his left thigh. He died half an hour after being found. Death was caused by concussion of the brain and loss of blood.
May 1	16 Drumheller Land Co., Ltd	Mike Musat	28	Driver	He was bringing out a loaded trip when the first car jumped the track, jamming his left foot between the rail and car bumper. Lacerated foot.

LIST OF ACCIDENTS IN DOMESTIC FIELD—Continued.

DATE	MINE	NAME	AGE	OCCUPATION	Details
May 27	27 The Western Commercial Co., Ltd	Joseph Salva	54	Tracklayer	He was carrying a heavy rail when he slipped and fell, straining his back.
June 4	4 Rose-Deer Coal Mining Co., Ltd	Steve Rogich	29	Miner	He was working in a pillar when a piece of rock fell from the roof, striking his back. Bruised back and internal injuries.
June 11	11 Scranton Coal Mining Co., Ltd.	T. Wychanko	29	Miner	He was putting up timber when the roof fell on his ankle, dislocating it.
June 18	June 18 Peerless Coal Co., Ltd	Stephen Carp	28.	Miner	He had fired two shots and after hearing two reports he returned to the face of the room, when the second shot exploded and he was struck by flying coal. Cut over left eye and on side of head.
June 24	June 24 Rosedale Coal & Clay Product Co., Ltd P. Mikerlin	P. Mikerlin	34	Miner	He was replacing a set of timber that had been blown out by a shot when a piece of rock fell from the roof, striking him on the back. Internal
June 26	June 26 The Great West Coal Co., Ltd	J. Cherewatin	32	Miner	
July 1(July 10 Regal Collieries, Ltd.	George Lupool	35	Driver	was Jammed between post and empty car. Broken collar bone. He was kicked in the head by a mule. Contusion on forehead.

N DETAILS	r He was helping machine runner to load up the machine after finishing a cut when a nigger head fell off the rib onto his leg, breaking the leg above the knee.	room. Left foot and ankle brius-	was kindling the fires under boilers and in transferring a velful of burning coal from boil- room to hoist room some of	a fire which rapidly the entire building. and arms. ct of closing a mine of his finger caught car and the door.	Crushed finger. A car got off track, the injured man
UPATION	Scraper			u	

Date Date D	64			Тн	E MINES	Branch		
11 The Great West Coal Co., Ltd 17 The Western Commercial Co., Ld 3 Hamilton Coal Co., Ltd 5 The Western Commercial Co., Ld 7 North American Collieries, Ltd 4 Canadian Pacific Railway Co., L		DETAILS		Fall of cap rock from roof at face of room. Left foot and ankle brius-	Kane was kindling the fires under the boilers and in transferring a shovelful of burning coal from boil- er room to hoist room some of it fell from the shovel on the	floor, starting a fire which rapidly spread through the entire building. Burns on hands and arms. He was in the act of closing a mine car door and got his finger caught between the car and the door.	Crushed finger. A car got off track, the injured man started to put car back on track without uncoupling horse from trip, horse started up throwing man underneath the car. Compound frac-	ture of left leg between knee and hip. He was chopping a boom with an axe which slipped and cut him on the back of left hand.
11 The Great West Coal Co., Ltd 17 The Western Commercial Co., Ld 3 Hamilton Coal Co., Ltd 5 The Western Commercial Co., Ld 7 North American Collieries, Ltd 4 Canadian Pacific Railway Co., L	ELD—Continued.	Occupation	Machine-Scraper	Miner	Engineer	Tippleman	Driver	Coal loader
11 The Great West Coal Co., Ltd 17 The Western Commercial Co., Ld 3 Hamilton Coal Co., Ltd 5 The Western Commercial Co., Ld 7 North American Collieries, Ltd 4 Canadian Pacific Railway Co., L	ic Fi	AGE	. 22	37	29	45	37	88
11 The Great West Coal Co., Ltd 17 The Western Commercial Co., Ld 3 Hamilton Coal Co., Ltd 5 The Western Commercial Co., Ld 7 North American Collieries, Ltd 4 Canadian Pacific Railway Co., L	CCIDENTS IN DOMEST	NAME	T. A. Macauley	J. Stewart	Norman Kane		G. Cobald	C. Leoni
	LIST OF A	MINE	The Great West Coal Co., Ltd	The Western Commercial Co., Ltd	Hamilton Coal Co., Ltd	The Western Commercial Co., Ltd		Co., Mine No. 6
		DATE	July 11			•		

LIST OF ACCIDENTS IN DOMESTIC FIELD—Continued.

DATE	MINE	NAME	AGE	Осспратіом	DETAILS
Aug. 11	11 Cardiff Collieries, Ltd	John Braban	42	Blacksmith	While punching holes in plate a piece of the face of the hammer flew off
Aug. 14	14 The Western Commercial Co., Ltd	Harry Jones	17	Mine laborer	hitting him in the eye. He was throwing a piece of coal in a car and caught his hand between
Aug. 20	20 Cardiff Collieries, Ltd.	Charles W. Borttoff	33	Hoist Engineer	the car and coal. Cut hand. He was installing screens in the tipple and caught his fingers be-
Aug. 21	21 The Western Commercial Co., Ltd	Oscar Goose	11	Driver	tween plate and a post. One finger tip cut off and one finger bruised. Stepped into hot water in mine pump
Aug. 24	24 McPeak Coal Co	Edward Spinks	34	Driver	room. Scalded foot. He was coupling cars when his horse started, jamming him hetween cars
					•
Aug. 26	Aug. 26 Union Collieries, Ltd.	Thomas Kozma	46	Loader	He was pushing an empty car and caught his foot in the frog of switch.
Aug. 29	Aug. 29 Canadian Pacific Railway Co., Mine No. 6, Lethbridge	Fred Smith	35	Slate picker	
Sept. 19	19 Hamilton Coal Co., Ltd	. W. H. Huska	24	Driver	his belt caught in the shaft coupling. Squeezed around abdomen. While riding on empty cars, a car jumped the track crushing him between the car and a new Parisad
Sept. 19	19 Alberta Block Coal Co., Ltd	Nick Poleuski	29	Machine-runner	

66			$\mathbf{T}_{\mathbf{HE}}$	Min	ES	Branch		
-	DETAILS	Piece of rock fell from roof hitting him on the leg at ankle. Cut on ankle.	He dropped some loose black powder on the floor and was picking it up when the powder ignited from the flamm of his cap lamp, burning him	about the face and eyes. He was crossing the cage seat at the shaft bottom when the cage caught him Tractured ribs	He had signalled to the engineer on	the surface that he was coming up on the skip, and had stepped into the skip and thinking the engineer had not heard the signal started to get out and had one leg over the started hosting. He had his leg both scarned	He was pushing an empty mine car when he fall striking his bross	
ELD—Continued.	Occupation	Machine-runner	Miner	Pusher	Rope-rider		Miner	Overman
c Fr	AGE	37	28	28	20		35	29 .
LIST OF ACCIDENTS IN DOMESTIC FIELD—Continued.	NAME	Frank Wagner	F. Riedel	A. Polsat	Cecil Dawson		Alexander Krisby	James Finlayson
LIST OF A	Mine	Sept. 23 Humberstone Coal Co., Ltd.	Sept. 28 The Bush Mine Coal Co	4 Sturgeon Consolidated Collieries, Ltd A. Polsat	7 Humberstone Coal Co., Ltd.		15 John Keehn	16 Keith & Fulton
•	DATE	Sept. 23	Sept. 28	Oct. 4	Oct. 7		Oct. 15	Oct. 16

LIST OF ACCIDENTS IN DOMESTIC FIELD—Continued.

		ANNUA	L KEPORT,	1919		01
DETAILS	He was lifting a car on the track when his fingers got caught between the car and rail, cutting the end off the first finger and crushing the other three (left hand).	He was putting up a set of timber when the roof caved falling on him. Injured internally.	He was bringing out a trip of full cars and bumped into a full car which had become uncoupled from the trip ahead of him. Bruised hip and injured pelvis.	He was digging coal from the face when a piece fell on to his leg. Bruised leg.	He was standing watching a trip being lowered when the brake strap on the gin broke allowing the drum to travel at a high speed, and a piece of pipe attached to the drum was thrown off catching him on the side of the head, killing him instant.	Fall of coal at face of room resulting in fractured left leg and internal injuries. Fatal.
Occupation	Miner	Miner	Driver	Miner	Not employed	Miner
AGE	45	35	19	46	98	29
NAME	Mike Kosikreweg	M. Edwards	William Sandyisk	Edward Shultz	Allan R. McDonald	Thos. Halaburda
MINE		24 North American Collieries, Ltd. (Drum-heller)	26 Twin City Coal Co., Ltd	26 McPeak Coal Co	27 Peter Jones	l Federal Coals, Ltd.
DATE						
D,	Oct.	Oct.	Oct.	Oct.	0ct.	Nov.

DATE	MINE	Name	AGE	OCCUPATION	DETAILS	
Nov. 27	Nov. 27 Round Hill Collieries, Ltd	Auton Yurkoski	35	Weighman	The R.R. locomotive was placing empty cars and this man went to move the loading apron when the cars struck the apron crushing him	
	,	•		-	between it and the tipple, breating one leg below the knee and crushing both legs.	T
Nov. 29	Nov. 29 Canadian Pacific Rallway Co., No. 6 Mine Peter	Peter Horhozer	- 47	Loader	While working at the face a piece of rock fell on his back causing severe bruising of back.	тне Мі
Dec. 4	4 Canadian Pacific Railway Co., No. 6 Mine	No. 6 Mine George Miskaleive	- 26	Driver	The horse he was driving became	NES
Dec. 5	The Ben Nevis Mines, Ltd.	John McGladrie	37	Miner	on top of him. Severely bruised about chest and broken ribs. He was working at the face of a room	Bran
Dec. 11	11 North American Collieries, Ltd., Evans- bure		6		when a fall of rock from the roof struck him on the back. Bruised back and ribs.	СН
Dec. 12	12 Sturgeon Consolidated Collieries, Ltd., No.	Venneum	ກີ ວ	MATCHER TOWN	wheel he told the motorman to back up and forgot to remove his hand, with the result that the wheel passed over his left hand badly crushing the middle fingers.	
	snait	William Haas	4 8	Miner	He was being lowered down the shaft on the skip when the brake on the drum slipped allowing the skip to strike the bottom too heavily. Sprained ankle and bruised back.	

LIST OF ACCIDENTS IN DOMESTIC FIELD—Continued.

	TI TO TOTT	TINI OF TROUBLES IN THE			
DATE	Mine.	NAME.	AGE	Осстратюм.	ВЕТАП.В.
Dec. 12	Dec. 12 Sturgeon Consolidated Collieries, Ltd., Nc. 2 Shaft	Nc. David Osterson	70	Miner	He was being lowered down the shaft on the skip when the brake on the drum slipped allowing the skip to strike the bottom too heavily. Fracture of the fifth lumbar vertebra.
Dec. 15	Dec. 12 North American Collieries, Ltd., Coalhurst Austin Wills	Austin Wills	35	Loader	He was loading out coal from the center shot when the side of coal fell on him, breaking his left log between the knee and ankle.
- Control of the Cont					

70					Тне	Min	es]	Branc	H		
DURING 1918.	Details	Leg crushed between cars on tipple.	-Fall of top coal in pillar. Cut on hea i	and right leg injured. He was mining out a stump of coal in a nillar when coal and can rock	fell on him, breaking his right leg- The car on which he was riding jump- ed the track, crushing him between	ina cimber. by loaded cars	Fatal Slipped off platform at face of angle	While boring a noie in the top coal. Scalp wound. He was walking along the gangway committee his lann with his hand on	top of the bonnet when a piece of rock fell from the roof striking him on the hand, cutting the second finger of his right hand, necessitating amputation of the finer at the first	joint. Fall of coal from corner of pillar.	Fatal. He was starting the coal in No. 92 chute and must have slipped and fallen into the chute and was buried by the coal which suffocated him. Fatal.
IE BITUMINOUS FIEL	Оссиратіон	Car coupler	Miner	Miner	Driver	Car handler	Miner	Miner		Miner	Miner
IN TE	AGE	36	33	48	23	25	56	34		36	49
CCIDENTS WHICH HAVE OCCURRED IN THE BITUMINOUS FIELD DURING 1918.	NAME	Louis Fidenato	J. Lipnioka	P. King	E. Fondrick	Samuel Edwards	John Amado	John Reinnikka		Samuel Parker	Joseph Beranek
LIST OF ACCIDENTS WH	Mine	4 Hillcrest Collieries, Ltd.	West Canadian Collieries, Ltd., Bellevue J. Lipnioka	4 Brazeau Collieries, Ltd	9 Blue Diamond Coal Co., Ltd	22 Hillcrest Collieries, Ltd.	23 Oliphant-Munson Collieries, Ltd.	24 Canmore Coal Co., Ltd.	-	8 West Canadian Collieries, Ltd., Bellevue -	9 Franco-Canadian Collieries, Ltd
	DATE	Jan. 4	Jan. 4	Jan. 4	Jan. 9	Jan. 22	Jan. 23	Jan. 24		Feb. 8	Feb. 9

LIST OF ACCIDENTS IN BITUMINOUS FIELD—Continued.

		Annu	JAL B	REPORT		18			71
DETAILS	He was spragging the mine cars when the horse started away jamming him between the car and side of roadway. Broken pelvis bone.	A boom fell from the roof in an old room striking him on the right leg, breaking it above the ankle.	Burned on head and hands. Explosion of gas, same being ignited by	A piece of rock fell from the roof striking him on the back of his head knocking him against the coal face	and cutting his head. Fracture on left side of pelvis. Rid-	rushing him between two trees. Premature explosion of detonator.	Doss of thumb and two ingers. Bruised hip. Missed his footing coming down from angle to counter en-	try and fell down into the raise. Left arm broken below elbow. Fall of exal at face of room.	He was preparing a place to set a prop when a piece of rock fell from the roof striking him on the head, fracturing his skull and causing instant death.
Осспратиом	Driver	Miner	Miner	Miner's helper	Driver	Winer	Miner	Miner	Miner
AGE	27	34	60 80 80 80 80 80	30	30	35	53	39	84
NAME	Ltd, Lovettville Walter Tauchuk	William Kuleski	Frank Pokorney	G. Forcheim	Alexander Coutent	J. Jacquart	T. Davis	Antonio Cemetta	Frank Lombardo
MINE	6 North American Collieries, Ltd., Lovettville	Mar. 14 Hillcrest Collieries, Ltd	April 3 Franco-Canadian Collieries, Ltd.	4 Canmore Coal Co., Ltd	April 4 Saunders Creek Domestic & Steam Coal	April 11 Saunders Creek Domestic & Steam Coal	April 12 Blue Diamond Coal Co., Ltd.	30., Ltd	April 15 Jasper Park Collieries, Ltd
DATE	Mar. 5	Mar. 14 I	April 3	April 4	April 4	April 11	April 12	April 15	April 15

THE MINES BRANCH

LIST OF ACCIDENTS IN BITUMINOUS FIELD—Continued.

	nd nd	rd.	and vild- H	shop pow- esul' were		in Sal ng it
Details	He got off the 1 open No. 2 do caught between	goof which had not been opened. Injuries to brain and spinal cord. Fatal over a wing board striking his ribs on the board. Bruised side.	A fire occurred in the time office and extended to powder house. Building had burned down and thinking in early an effect of the power of the stream of the was	made to save the blacksmith shop adjoining when the powder in powder house exploded, with the resulting Brownrigg and Krauze were killed and the rest injured.		He was pushing coal down a caute in No 1 slope when a piece of coal rolled over the check board, striking him on the left leg, breaking it above the knee.
	90 8					
Occupation	acting ss					er
Оссия	Motorman g Driverboss	Examiner	Manager Blacksmith Carpenter	Mecnanic Miner Miner Miner Miner	rer	winer
	Moto	Exan	Manager Blacksmi Carpente	Mechan Miner Laborer Miner Miner	Laborer Laborer Miner Miner	Miner Miner Mine
AGE	20	48	88 40 60	22 4 4 8 8 4 8 8 4 8 8 4 8 8 4 8 8 4 8 8 4 8 8 8 4 8 8 8 4 8 8 8 8 4 8	38888	27 24
		 	rigg	(3f:)		
NAME	cLeod		Brown uze	Unphant Daguile lel Gibson Verbocki Szotkouski H. Martin	maunk aunk ki Kostuk	shyn chuk
Z 	Daniel McLeod	W. Fisher	John H. Brownrigg Karl Krauze Walter Landon	Wm. Unphant (9F.) John Dagulle Daniel Gibson J. Werbocki Joe Szotkouski W. H. Martin	Steve Romaunk Bill Romaunk M. Biliuski Andrew Kostuk R. Prud	A. Urban Joe Pawlshyn Mike Hibchuk
	Dan	<u> </u>	Kar Kar Wal	John Joe W. F. W. F. W. F.	Ster Bill M. And R.	1
		levue	· ·			Coke Co., Ltd
		Ltd., Bellevue	.d			Ke Co.
	Ltd.		ies, Ltd.			
Mine	eries,	ollierie	Collier			: Coal
	Colli	ian C	nson (Creek
the contract of the contract o	. Park	Canad	ınt-Mu			livray
	April 19 Jasper Park Collieries, Lt	4 West Canadian Collieries,	14 Oliphant-Munson Collieries			17 McGillivray, Creek Coal &
DATE	ril 19		May 14			
🛱	Api	May	Ma			Мау

LIST OF ACCIDENTS IN BITUMINOUS FIELD—Continued.

DATE	Mine	NAME	AGE	Occupation	DETAILS
May 2]	21 McGillivray Creek Coal & Coke Co., Ltd	Coke Co., Ltd Ferdinand Thiery	52	Miner	He was digging the bench coal when a large piece of rock fell from the
May 28	25 West Canadian Collieries, Ltd., Bellevue	-William Randall	16	Outside laborer	left side. Fatal. Team ran away and he was thrown out of the wagon breaking his leg
May 3(30 West Canadian Collieries, Ltd., Bellevue P. McLafferty	P. McLafferty	30	Miner	and seriously cutting his thigh.
June 1	1 Blue Diamond Coal Co., Ltd	John Kulba	24	Driver	Juries to back, chest and head. He was breaking a new horse to work,
June 4	4 International Coal & Coke Co., Ltd	Thomas Merriam	43	Miner	which got excited and clushed min- up against the car. Crushed hips. He was working in a pillar when a piece of cap rock fell from roof.
June	Franco-Canadian Collieries, Ltd.	Robert Barnhill	53	Miner	Dislocated right shoulder and cut on side of head. He was riding up the slope on a trip of cars when he slipped off in front
June 12	12 Cadomin Coal Co., Ltd	Philip Sharamata	22	Miner	of the trip, being badly bruised by the cars. He was repairing timber in No. 27 angle near counter level, when a fail
June 1	June 13 Blue Diamond Coal Co., Ltd.	Daniel McLean	35	Miner	of coal took place burying him and suffocating him. Fatal. He was repairing timber, when a fall of coal took place, burying him,
June 18	June 15 Canmore Coal Co., Ltd	Ng Hoy (Chinese)	25	Laborer	crushing him so that he died before being taken out from the cave. He was working at a loading chute when a piece of coal fell from the chute, striking him on the head.

LIST OF ACCIDENTS IN BITUMINOUS FIELD—Continued.

DATE	MINE	NAME	AGE	Occupation	DETAUS
June	22 West Canadian Collieries, Ltd., Greenhill. Fred Lund	Fred Lund	30	Miner	Fall of coal at face of room, dislocat-
June	28 West Canadian Collieries, Ltd., Bellevue G. Moro	G. Moro	36	Mechanic's helper	eu mip. He was blasting rock and had tamped and fired two shots the second shot
					did not explode until he got back when it went off, blowing four fingers off his right hand.
July	17 West Canadian Collieries, Ltd., Bellevue - Walter Warn	Walter Warn	00 60	Outside foreman	He was cutting the side-poles on a railway car when the pole gave way allowing the lumber to fall on him
					dislocating his hip and breaking his
July	19 Cadomin Coal Co., Ltd.	G. Lee	42	Outside laborer	He was rolling logs, one of which
		:			rolled back onto his leg, breaking it below the knee (left leg).
July	27 West Canadian Collieries, Ltd., Bellevue J. Porwitt	J. Porwitt	76	Brakeman	Head jammed between cars when in the act of coupling cars when in
					motion. Crushed head. He died from the effects of injury on July
July	31 Blue Diamond Coal Co., Ltd.	E. V. Fisher	37	Miner	30th. He was drawing a pillar when the
					coal ran and he was caught by the coal and buried. Suffocated. Fatal.
Aug.	2 Canmore Coal Co., Ltd.	Nick Drapaka	53	Slope cager	He was coupling cars when the cars bumped and caught his arm. Bruis-
Aug.	3 Canmore Coal Co., Ltd	Mike Coleyak	35	Miner	ed right forearm. A piece of rock fell from the roof cut-
Aug.	6 Canmore Coal Co., Ltd.	Joseph Kanik	36	Rope rider	His leg was caught between the bump-
					leg above the ankle.

LIST OF ACCIDENTS IN BITUMINOUS FIELD—Continued.

DATE	Mine	NAME	AGE	Occupation	Details
Aug.	6 Brazeau Collieries, Ltd	K. Haratychuk	4.	Miner	The injured person was lowering a loaded car down slant, with a hemp rope, got his foot caught in loose coil of rope which was pulled against the snubbing post. Fracture of right leg.
Aug. 1	Aug. 14 Canmore Coal Co., Ltd	John T. Musgrove	8	Overman	He was at the sinking pump near foot of the slope when an empty car was pushed over the knuckle without being attached to the rope. The car struck him, fracturing his skull and left leg, from the effects of
Aug. 1	Aug. 14 West Canadian Collieries, Ltd., Bellevue - C. Matousk	C. Matousk	21	Bucker	which he died. Bucking coal in chute when piece of coal struck him on the head. Cuts
Aug.	Aug. 16 International Coal & Coke Co., Ltd.	Josef Klis	32	Miner	on face and scalp. Piece of high side coal and timber teg fell striking him on the back,
Aug.	Aug. 19 Brazeau Collieries, Ltd.	A. Storosbchuk	38	Miner	throwing him under a loaded stationary car. Broken neck. Fatal. He was lowering a loaded car by means of a McGinty and did not apply the brake when the car got out
Aug. 2	22 Canmore Coal Co., Ltd	Alec Chalifey	21	Rope rider	of control, with the result that the empty struck him. Left cheek bone, lower jaw and right leg fractured, right hand badly torn. He was caught between a loaded car and prop. Bruised on left thigh and abdomen.

LIST OF ACCIDENTS IN BITUMINGUS FIELD—Continued.

DATE	MINE	NAME	AGE	Occupation	DETAILS
Aug. 29	Aug. 29 Canmore Coal Co., Ltd.	Robert Wade	34	Miner	He was moving a piece of rock when another piece rolled down, striking him on the finger Bruised and lac-
Sept. 3	3 Hillcrest Collieries, Ltd.	Joe Royle	16	Car handler	erated little finger, left hand. Foot caught between loaded cars when his horse ran away. Bruised
Sept. 16		H. M. Williams	45	Clerk	left foot. Fell over side of tipple. Fracture of
Dept. To	& Steam Coar	C. S. Thornton	26	Driver	lert lorearm. Got his foot caught under car bumper when jumping off car at tipple.
Sept. 12	Sept. 12 Canmore Coal Co., Ltd.	Hans Sar	22	Miner	Bruised foot. A piece of rock fell on his foot. Bruised with foot
Sept. 13	Sept. 13 Canmore Coal Co., Ltd.	Dym Ewashuk	22	Rope-rider	eq 11ght 1900. He was uncoupling cars when horses formed in and his finner was ion-
Sept. 16	Sept. 16 West Canadian Collieries, Ltd., Bellevue Joseph Newton	Joseph Newton	17	Bucker	med. Lacerated first finger, left hand. He was riding on the back end of air motor hauling trucks when the first
Sept. 28	Sept. 28 Canmore Coal Co., Ltd.	Fred Bukoway	40	Winer	truck jumped the track, knocking out a post which struck him on the head. Fatal.
Oèt.	2 Canmore Coal Co., Ltd	Vernon Pearson	29	Ass't Master Mechanic	ass't Master Mechanic Was kicked on the leg by a horse
Oct. 3	3 Canmore Coal Co, Ltd.	Sam Ewashuk	28	Driver	working on the upple. Bruised leg The horse he was driving stepped on
					his foot and knocked him down, in- juring him on his knee and abdo- men.

LIST OF ACCIDENTS IN BITUMINOUS FIELD—Continued.

		Ann		KEPOI		18			"
DETAILS	He was taking a car out from his working place when he got caught between the car and a prop. Bruised left side and one rib broken.	He was inserting the detonator into a stick of powder when it exploded, resulting in the loss of his left	hand and injury to his face. A piece of coal fell from the roof. striking him on the shoulder. Frac-	tured right shoulder blade and rib. A piece of rock rolled down from the high side of place crushing his ler.	against a timber. He was preparing to place a set timber when a fall of coal and rock	took place, burying him. His partner was framing the timber at the time. Death was caused through shock.	LHe was carrying some boards into a crosscut and was knocked down by a passing emity car. Emised entity	A piece of cap rock fell from the roof striking him on the head. Small cut on head.	He was included the far house stove, using gasoline. The gasoline exploded, throwing fire onto him. Severely burnt feet and left hand
Occupation	Miner	Miner	Miner	Miner	Miner		Bratticeman	Miner	Fanman
AGE	25	30	41	39	80		38	25	325
NAME	Wm. Kudafto	Angelo Evanoff	John Niemi	John Wnolle	Dymitro Breczko		Geo. Drapka	Wm. Bohyczuk	M. Ghiringhelli
Mine	16 Canmore Coal Co., Ltd.	17 Oliphant-Munson Collieries, Ltd	19 Canmore Coal Co., Ltd.	21 Canmore Coal Co., Ltd.	30 Blue Diamond Coal Co., Ltd.		8 Canmore Coal Co., Ltd.	9 Canmore Coal Co., Ltd	Nov. 19 West Canadian Collieries, Ltd
DATE	Oct. 16	Oct. 17	Oct. 19	Oct. 21	Oct. 30		Nov. 8	Nov. 9	Nov. 19
	. 🔾	-	_	-	-				

LIST OF ACCIDENTS IN BITUMINOUS FIELD-Continued.

					The second secon
DATE	Mine	NAME	AGE	Occupation	DETAILS
Dec.	Dec. 10 McGillivray Creek Coal & Coke Co., Ltd	& Coke Co., Ltd W. E. G. Hall	33	Assistant surveyor	Assistant surveyor He was climbing on a chute for the purpose of putting a spad in the
Dec.	Dec. 19 Canmore Coal Co., Ltd.	James Reid	န	Examiner	roof when he slipped. Left leg broken between knee and ankle. A shot was fired by Reid in a large
		John Zboya John Reinnikka	က က ဇ က က ဇ	Miner	piece of rock, ignited some gas causing a slight explosion, resulting in
		Ig. Nicaise	3 23	Bratticeman	chuk being burnt about the head,
					face and hands, and Nicaise being slightly burnt on face and hands,
Ç	The 91 Calemin Cont Co I + 3	Youn Inflor	é		his back bruised and both arms broken.
;	or Caucillan Coas Co., Dia.	מחווו דמשומה	63	Taurus Jaurus	Angle, after being warned not to
ı					do so, as there was gas in it. He was asphyxiated.
Dec.	24 Mountain Park Coal Co., Ltd.	D. Greaci	25	Chute-loader	He was bucking coal down the chute
	-				when a cave occurred causing a rush of coal which knocked him
					down in the chute. Cut face, bruis-
					ed back and neck.

FATAL ACCIDENTS.

The fatal accident which occurred to George Cook on January 1, 1918, at the mine operated by the Cardiff Collieries, Limited, near Cardiff, was caused through his being crushed between the coal rib and a full car. He was pushing the center car of a trip of three cars, and got crushed as above, resulting in injury to the bladder and crushed pelvis, from the effects of which he died on January 5, 1918.

The fatal accident which occurred to Samuel Edwards on January 22, 1918, at the mine operated by the Hillcrest Collieries, Limited, Hillcrest, was caused through his being caught by a trip of runaway loaded cars on No. 1 slope. He apparently was walking up the slope behind the trip when the link between the first and second cars broke, letting three cars back down the slope, catching Edwards, death being instantaneous.

The fatal accident which occurred to Samuel Parker on February 8, 1918, at the mine operated by the West Canadian Collieries, Limited, Bellevue, was caused through a fall of coal from the corner of a pillar.

The fatal accident which occurred to Joseph Berauck on February 9, 1918, at the mine operated by the Franco-Canadian Collieries, Limited, Frank, was caused through his falling in the chute when starting the coal, and being buried by the coal, which suffocated him.

The fatal accident which occurred to Frank Lombardo on April 15, 1918, at the mine operated by the Jasper Park Collieries, Limited, Pocahontas, was caused through a fall of rock. He was preparing to set a prop when a piece of rock fell from the roof, striking him on the head and fracturing his skull, causing instant death.

The fatal accident which occurred to Daniel McLeod on April 19, 1918, was caused through his being caught between a trip of loaded mine cars and a door on the main entry. He got off the motor, which was pushing a trip of loaded cars out ahead of it, and went ahead to open the door, when in some manner he got caught as above, the door not having been opened, receiving injuries to the spinal cord and brain which proved fatal.

The fatal accident which occurred to Andrew Denysink on April 26, 1918, at the mine operated by the Alberta Coal Mining Company, Limited, Cardiff, was caused through his returning to his place before the second of two shots had exploded. He had ignited the fuse for two shots, and was returning to the face, when the second shot exploded, the flying coal from which struck him, causing injuries to the head and arms, from the effect of which he died on the morning of the 27th of April, 1918.

The fatal accident which occurred to John Dymnisky on April 27, 1918, at the mine operated by the Union Collieries, Limited, near Diamond City, was caused through his being injured in some manner not known. He was driving a horse, and was taking two loaded ears to the outside from a working place, when he was found

lying on the track, having received injuries in some unknown manner to his head and left leg, from which he died, death being due to loss of blood and concussion of the brain.

The fatal accident which occurred to John H. Browrigg and Karl Krauze on May 14, 1918, at the mine operated by the Oliphant-Munson Collieries, Limited, Oliphant Mines, was caused through an explosion of powder. A fire occurred in the time office building, a portion of which was used to store the daily supply of powder. The fire in this building had burned down and a fire had started in the blacksmith shop adjoining and attempts were being made to put out the fire in the blacksmith shop when the powder exploded, killing the above and injuring several others.

The fatal accident which occurred to Ferdinand Thiery on May 21, 1918, at the mine operated by the McGillivray Creek Coal and Coke Company, Limited, near Coleman, was caused through a fall of rock from the roof. He was digging the bench coal when a large piece of rock fell from the roof, crushing his back and left side, from the effect of which he died shortly after.

The fatal accident which occurred to Philip Sharamato on June 12, 1918, at the mine operated by the Cadomin Coal Company, Limited, at Cadomin, near Mile 22, on the Grand Trunk Pacific Coal Branch, was caused by a fall of coal. He was repairing an angle when a fall of roof coal took place, burying him and suffocating him.

The fatal accident which occurred to Daniel McLean on June 13, 1918, at the mine operated by the Blue Diamond Coal Company, Limited, Brule Mines, was caused through his being buried by a fall of coal. He was repairing the timber in a pillar, when a fall of coal took place, crushing him so that he died before being taken out.

The fatal accident which occurred to J. Porwitt on July 27, 1918, at the mine operated by the West Canadian Collieries, Limited, Bellevue, was caused by being jammed between loaded cars. He was coupling cars while in motion, and got his head crushed between the cars, receiving injuries from which he died on the 30th July, 1918.

The fatal accident which occurred to E. V. Fisher on July 31, 1918, at the mine operated by the Blue Diamond Coal Company, Limited Brule Mines, was caused by a fall of coal. He was drawing pillars, and had got in behind the battery to start the coal, when a rush of coal caught and buried him, death being due to suffocation.

The fatal accident which occurred to John T. Musgrove on August 14, 1918, at the mine operated by the Canmore Coal Company, Limited, Canmore, was caused by his being struck by a runaway empty car on the slope. He was at the sinking pump, near the foot of the slope, when an empty car which had been pushed over the knuckle at the top, becoming detached from the rope, randown the slope, striking him, fracturing his skull and left leg, from the effects of which he died about one hour and a half later.

The fatal accident which occurred to Joseph Klis on August 16, 1918, at the mine operated by the International Coal & Coke Company, Limited, Coleman, was caused by a fall of coal. He and his partners were loading a car, having placed the legs for a set in position, when a piece of coal slipped off the high rib, knocking out the leg, which struck Klis, fracturing his skull, killing him instantly.

The fatal accident which occurred to Joseph Newton on September 16, 1918, in the mine operated by the West Canadian Collieries, Limited, Bellevue, was caused through his being struck on the head by a prop. It is presumed that he was riding on the back end of the compressed air locomotive when a timber truck got off the track, knocking out a post, which struck him on the head, from the effects of which he died shortly after being struck.

The fatal accident which occurred to Allan R. McDonald on October 27, 1918, at the mine operated by Peter Jones, near Diamond City, was caused through his being struck on the head by a piece of pipe. He was standing watching a loaded car being lowered down a surface incline, when the brake strap broke, allowing the drum to travel at a high speed, and a piece of pipe attached to the pulling arm broke loose and caught him on the side of his head, killing him instantly.

The fatal accident which occurred to Dymitro Breczko on October 30, 1918, at the mine operated by the Blue Diamond Coal Company, Limited, Brule Mines, was caused by a fall of coal and rock in pillar workings. He was preparing to place a set of timber when a fall of coal and rock took place, burying him. He was taken out within twenty minutes, but was dead, death being caused through shock.

The fatal accident which occurred to Thomas Halaburda on November 1, 1918, at the mine operated by the Federal Coal, Limited, near Lethbridge, was caused by a fall of coal. He was taking down draw slate at the face of his room, having loaded out part of the coal that was undercut, when a large piece of coal rolled out from the face of the room onto his leg, fracturing it and injuring him internally. He died about three hours after the accident from shock.

The fatal accident which occurred to John Luklan on December 21, in the mine operated by the Cadomin Coal Company, Limited, was caused through asphyxiation. He entered a crosscut, off the angle which he was driving, where an accumulation of gas had been fenced off. The examiner had previously warned him not to enter this crosscut.

On May 21, 1918, William Nikol died from the effects of an accident which occurred to him on October 31, 1917, in the mine operated by the Chinook Coal Company, Ltd., near Commerce, in which he had his leg broken.

This accident is not included in the number reported for 1918.

TABLE SHOWING ACCIDENTS AS THEY OCCURRED BY MONTHS DURING THE YEAR 1918

		Above	Groun	d			Ground	1	Total
Months	Fatal	Serious	Slight	Tota1	Fatal	Serious	Slight	Total	Above and Below Ground
January February March April May July August September Joctober November	2	2 1 5 1 2 1 1	2 1 11 1 3 1 1	4 1 1 18 2 2 4 2 2 2 1	2 2 4 1 2 2 2 1 1 1 1	6 1 2 2 2 2 5 1 4 	7 1 1 7 3 4 2 11 8 6 3 3	15 4 3 13 6 11 5 17 9 15 4	19 5 4 14 24 13 7 21 11 17 6 18
	3	16	21	40	19	44	56	119	159

Note—In the month of May there were two persons killed, four persons seriously injured, and eleven slightly injured by an explosion of powder in the mine office of the Oliphant-Munson Collieries, near Coalspur, caused by fire.

Tabulated list of Accidents occurring in the Province above and below ground during the year 1918:

a.	Fa	tal	Ser	ious	Sli	ght	To	otal
Cause	A	В	A	В	A	В	A	В
Haulage	1	7	2	17	1	14	4	38
Falls of rock		2	Í	5		20	il	27
Falls of coal		7		7		3	Íl	17
Shaft accidents				2	1	2	1	4
Shot-firing		1	1	3		4	1	8
Ignition of gas		[_	1	5		4	ii	9
Asphyxiation		1			ll		li	1
Falling in chute		1 1	Í	İ	Í		ii	1
Struck by coal in chute				1		2	ii	3
Fall of timber in room				1				1
Slipped while coming down				_				_
angle						1		1
Electric coal-cutter				1		li		1
Tipple machinery				_	1		3	_
Struck by empty cars on			-		_			
tipple			1		1		2	
Struck by loaded cars on			-		-		_	
tipple		í . í	i i	i	2		2	
Ignition of powder from fire					_		-	
at the office	2		4		11		17	
Unloading timber			2		1		2	
R. R. cars			2		-		2	
Miscellaneous			2	2	4	6	6	8
}	3	19	16	44	21	56	40	119

Tabulated List of Accidents occurring in the Province above and below ground during the year 1918, classified according to the Districts in which they occurred.

					113	Silon+	feto",	to.	Į.
No. of District	2	ratal	מנו	Serions		- 11.5		1	and below
Name of District	Above	Below	Above	Below	Above	Below	Above	Below	ground
Crow's Nest Pass			4	9	 	 ∞		21	26
Pincher Creek		2	2	3	2	9	1 1 1 1 1 1 1	11	16
Magrath	1 1 1 1 1 1 1 1 1			1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
Taber			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			2	1	67	67
Bow Island			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1	1 1 1 1 1 1 1	, ,-	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
Medicine Hat	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1			Н	1 1 1 1 1 1 1 1 1 1 1 1 1	٦-	7
Aldersyde	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1		1	1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
Canmore	;	1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	6	2	12	2	22	24
Banff	1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1		1	1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
Drumheller	1	1 1 1 1 1 1 1 1 1	+	<u>۔</u> ت	ಣ	11	4	16	- 50
Big Valley		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				1	6	1	
Brazeau	1		23	4	- 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	•	#	•
Donne					1 1 1 1 1 1 1 1 1 1				
Tagomha	1		1	•				-	 1
Trochi						1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1
Three Hills			1	1		-	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	67	ο 1 1
Carbon	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1		÷	1	H	1
Battle River		1 1 1 1 1 1 1 1		1 1 1 1 1 1 1	1 1 1 1 1 1 1				
Camrose		1	-	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1	-	1	-
Tofield	1 1 1 1 1 1 1	1 1 1 1 1 1 1 1				6		X	0
Clover Bar	1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	 	1 1 1 1 1 1 1	on c	1 1 1 1 1 1 1 1 1	o [~	20
Momentum		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1	10	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	· -	1	• 67	• 61
Cardiff	1	2		۱	1	1	2	, ¢0	ı.co
Wabamun	1 1 1	1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1
Pembina	1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1	-	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1	1 1 1 1 1	-	-
Jasper Park	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	rc or		61	1 1 1 1 1	-	1 1 1 1 1 1	∞	∞
Yellowhead Pass	63	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	4	67	11		17	en (20
Mountain Park	1 1 1 1 1 1 1	67	H	1 1 1 1 1 1		1	-	— ·	4
Peace River	1 1 1 1 1 1 1 1 1 1	1			1 - 1 - 1 - 1			1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	ಣ	19	16	44	21	26	40	119	159

The following tables give the classification of accidents according to the Coal Field in which they occurred:

DOMESTIC.

	AB(ABOVE GROUND	ND	BE	BELOW GROUND	ND
CAUSE	Fatal	Serious	Slight	Fatal	Serious	Slight
CES6 889 110 12 12 13 14 15 15 15 15 15 15 15					444 43 H	
Shot firing, open lamp fell in black powder]	, N

BITUMINOUS.

	AB(ABOVE GRONUD	Q.D	BE	BELOW GROUND	IND
CAUSE	Fatal	Serious	Slight	Fatal	Serious	Slight
Rope haulage, struck by runaway empty cars— Rope haulage, crushed between car and timber— Rope haulage, crushed between car and timber— Rope haulage, struck by trip of loaded cars— Rope haulage, struck by trip of loaded cars— Rope haulage, struck by empty car— Rope haulage, struck by empty car— Rope haulage, caught in McGinty rope— Compressed air locomotive haulage, coupling cars— Compressed air locomotive haulage, struck by timber dislodged by trip compressed air locomotive haulage, crushed between dor and loaded cars— Horse haulage, crushed between timber and car— Horse haulage, crushed between timber and car— Horse haulage, stepped on by horse— Horse haulage, runaway team— Fall of rock at face of room— Fall of rock in pillar workings— Fall of coal at face of room— Fall of coal at face of room— Fall of coal repairing timber— Fall of coal repairing timber— Fall in chute, smothered by coal— Struck by piece of coal in chute— Ignition of gas—		HH.		4444		

Table showing accidents during 1918 classified according to the Mines in the DOMESTIC field in which they occurred:

			ABOVE (ABOVE GROUND			BELOW GROUND	SROUND		Total
Name of Operator	District	Fatal	Serious	Slight	Total	Fatal	Serions	Slight	Total	and below
Can. Pac. Ry. Dept. Nat. Res. No. 3	Lethbridge			1 E I I	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		2 6 1	7	23	23
Res.	Lethbridge			81	4		67	က	٠.	о ,
Hegeral Coals, Ltd.	Lethbridge		 	1 1 1 1 1 1 1 1 1	1 1 1 1 1 1	-		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		-
Trusts & Guarantee Co Ltd.	Lethbridge					4	 	-	٠,	- -
North Amer. Coll., Ltd., Coalhurst	- Lethbridge						- - - - - - - - -	1		
Peter Jones, Coalhurst	Lethbridge	-		1 1 1	Т					-
Canada West Coal Co., Ltd.	Taber	-	 	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 1 1 1 1 1 1 1			
Cutha a Dam	Dow Island	1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1		1	٦ -	⊣ +	-i -
Redeliff Briek & Cosl Co. Ltd	Downstand			1						
Rosedale Coal & Clay Products, Ltd.								1	4 673	
Rose-Deer Coal Mining Co., Ltd.	Drumheller		1 1)	1	-	
Drumheller Land Co., Ltd.	Drumheller				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			· Н	ı 1	1 7
North American Collieries, Ltd. (Mou									ı	!
arch Mine)	Drumheller		1	1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1	74	-	81	81
Sterling Coal Co., Ltd.	_ Drumbeller		П		-			 		-
Alberta Block Coal Co., Ltd	Drumheller						1	H	-	
Western Commercial Co., Ltd.	Drumheller		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	-	-	1 1 1 1	1	ю	5	9
Peerless Coal Co.	Drumheller	-		-	-	1	н		-	67
Scranton Coal Co., Ltd.	Drumheller		1 1 1 1 1 1	1 1 1 1 1 1 1 1	1 1 1		1		-	H
Hamilton Coal Co., Ltd	_ Drumbeller		1 1 1 1 1 1	-			1		-	67
John Keehn	- Hanna			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1		-	 	-	Н
The Ben Nevis Mines, Ltd.	Lacombe	1	1 1 1 1 1		1		 	П	Н	-
The Ellis Coal Co., Ltd.	-Three Hills	1	1 1	1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1	-		. 67
Knee Hill Coal Co., Ltd.	Carbon	 	1	1	1		- 		ı ,	
Round Hill Collieries, Ltd.	Camrose	-	н	1	-				1	
Humberstone Coal Co., Ltd.	- Clover Bar							2	87	01
The Bush Mine Coal Co					!	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		н		-
Keith & Fulton	Clover Bar		1	1 1 1 1			- -		Н	-

87488411	70
භ ≒ 4 භ භ හ ≒ ≒	8
4	33
1 1 2 2 1 1 2	21
	4
	12
	9
	 10
The Great West Coal Co., Ltd Clover Bar Edmonton Collieries, Ltd Clover Bar Twin City Coal Co. Ltd Edmonton Sturgeon Consolidated Coll., Ltd Namao Cardiff Collieries, Ltd Cardiff Alberta Coal Mining Co., Ltd Cardiff	

Table showing accidents during 1918 classified according to the Mines in the BITUMINOUS field in which they occurred:

Total	and	4411 6 42 6 1 6 1 6 1 6 1 6 1 6 1 6 1 6 1 6 1 6	68
	Total	0347-0001000 H00H0H0	61
BELOW GROUND	Slight	H H H H H H H H H H H H H H H H H H H	23
BELOW	Serious	н ннанож н анн	23
	Fata1	7 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	15
	Total	H 4	28
ABOVE GROUND	Slight	1 1 2 1 1 1 1	15
ABOVE	Serions	4 0 4 1	1
	Fatal	Ø	7
District	District	Crow's Nest Pass Crow's Nest Pass Crow's Nest Pass Crow's Nest Pass Crow's Nest Pass Crow's Nest Pass Canmore Brazeau	
Name of Onerator	romand to ambu	Hillorest Collieries, Ltd. Franco-Canadian Collieries, Ltd. West Can. Collieries, Ltd., Bellevue	

No accidents were reported as having occurred in the Authracite field during the year 1918.

LIST OF PROSECUTIONS UNDER THE MINES ACT DURING 1918.

Mine in which Contravention was Committed	Description of Defendant	Offence Charged	Result of Proceedings	Penalty	Costs
North American Collieries, Ltd. (Lovett)	Miner	That he did leave powder can in mine.	Convieted	Convicted \$10.00 or three months	86 00 00
North American Collieries, Ltd. (Lovett)	Miner		Convicted \$10.00 or	\$10.00 or three months	8.2 07.0
North American Collieries, Ltd. (Lovett)	Miner	That he did go into the boiler room and tamper with valves of the injector (Section 97)	Convicted		\$2.50
North American Collieries, Ltd. (Lovett)	Track-layer	That he did go into the mine in an intoxicated condition. (Section 100)	Convicted		\$2.50
Yellowhead Coal Company, (No. 1 Seam)	Miner	tid use a shot-firing battery narge his shots. (Clause "A" tion 10, Section 65)	Convicted	Fined \$25.00	\$3.50
The Hillcrest Collieries, Lid. Miner	Miner	That he did walk up or down the No. 1 hoisting slope without permission of the manager or overman. (Subsection 2, Section 114)	Convicted	\$20.00 or one month	\$8.80
C. Freemont Henry	Operator	That he did fail to comply with Section 42 of The Mines Act for the month of May, 1918	ConvictedFined \$5.00	Fined \$5.00	\$3.00
Stephen Schmidt	Operator	That he did fall to comply with Section 42 of The Mines Act for the month of April and month of May, 1918	Convicted	Fined \$5.00	\$3.00

LIST OF PROSECUTIONS UNDER THE MINES ACT DURING 1918.—Continued.

Mine in which Contravention was Committed	Description of Defendant	Offence Charged	Result of Proceedings	Penalty	Costs
The Canmore Coal Co., LtdMiner	Miner	That he did ride on cars in the mine without permission of the manager. (Section 103)	Convicted	mine nager. Convicted \$50.00 or two months	86.00
The Canmore Coal Co., Ltd. Rope-rider		rith wire a ction 97)	Convicted	\$50.00 or two months	
R. Murtland	Operator	That he did operate the Murtland Mine No. 715 without a certificated per- son being in charge. (Sub-section 5, Section 29)	fine oer- don Convicted Fined \$10.00	Fined \$10.00	00 65
R. Murtland	Operator	the necess egisters k n 9, also S	ecessary rrs kept. also Sec- Convicted Fined \$10.00	Fined \$10.00	00.6\$

MINE RESCUE AND FIRST AID WORK.

Mine Rescue Stations are in operation at the mines operated by the Canadian Pacific Railway Co., Department of Natural Resources, Lethbridge; North American Collieries, Ltd., Coalhurst; the Chinook Coal Co., Ltd., Commerce; the Jasper Park Collieries, Ltd., Pocahontas; the Brazeau Collieries, Ltd., Nordegg; and the Mountain Park Coal Co., Ltd., Mountain Park.

In addition to these stations there are also three cars in operation. Car No. 1 visits all the mines in the Crow's Nest Pass District, Car No. 2 the mines at Canmore and Bankhead, and Car No. 3 the mines in the Drumheller and Big Valley-Districts.

Car No. 1 is under the charge of Mr. Edward Royle, Car No. 2, Mr. Wm. B. Powell, and Car No. 3, Mr. John Hooks. The Lethbridge, Commerce and Coalhurst stations are under the charge of Mr. Samuel Troman; the Pocahontas station, Mr. James Clyne; the Nordegg station, Mr. James M. Stewart; and the Mountain Park station, Mr. James Derbyshire.

The superintendents in charge of the cars and the Lethbridge, Commerce and Coalhurst stations, devote their whole time to instruction in first aid and mine rescue work, while the superintendents of the other stations are employed at the mines where the stations are located and devote whatever portion of their time is necessary to this work.

Messrs. Troman, Hooks and Royle are returned soldiers, and it is intended that, when consistent with efficiency, returned soldiers will in future be appointed superintendents of all mine rescue cars and stations.

The cars are fully equipped for mine rescue work and are divided into lecture-room, office, kitchen and toilet. A small engine and dynamo, and a set of batteries for recharging electric cap lamps that are used by the men when in training, have been installed in each car. These plants also supply light for the cars. Provision is also made for cooking and sleeping accommodation for persons engaged in mine rescue work. The cars can either be heated by heaters installed on the cars, or by steam supplied from the mines at which they are stationed.

Provision is also made at each car and station for the recharging of the portable electric lamps, by the electric plant at the mine at which the car or station is located, so that these lamps can be recharged without having to be removed from the car. This is in addition to the electric plant that is installed on each car.

The Edison electric cap lamp has now been installed on all the cars and stations with the exception of Car No. 2, which has the Wico Electric cap lamp. The Lethbridge, Commerce and Coalhurst stations have the use of the Edison Electric cap lamps at the mines at which these stations are located.

All the mine rescue apparatus at present in use in the Province is of the Proto type, and is capable of being used for at least two hours' continuous work. The Gibb mine rescue apparatus, after several tests had been made to prove its efficiency, was found to give satisfactory results, and it is expected that before the 31st of December, 1919, car No. 3 will be equipped with 10 sets of this apparatus, together with a full supply of spare parts for same.

The following is the equipment kept in each car and station (including ten apparatus of the Gibbs type, which have been ordered, but not yet received).

been diaciea, but mor yet received).	./.									
-		CARS		Lethbridge	Coalhurst	Соттегсе	Nordegg	Pocahontas	Mountain	
rdmbment	No. 1	No. 2	No. 3	Station	Station	Station	Station	Station	Park Station	Totals
Breathing apparatus (Gibbs)	1	3	10							10
Breathing apparatus (Proto)	10	10	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	10	5	2	7	11	9	64
!_	4	4	-	-	-		4			o ra
Pulmotor Type A	1		· 81	ı 		·	-	·		10
Fulmemotor	1	-	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			1 1 1	1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	 с
	1	-		-			1	-	1	4 IC
Animal air tester	Н	-	-	1 77	1		' 		i 	т
Meter for testing Reducing Valves	п	-	H	-	ا	ı , ,	ı 	· 	! 	, 4,
Electric cap lamp (Edison)	12	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	12		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		12	12	12	09
Electric cap lamp (Wico)		12			1,	1,	1,		1,	12
First aid cabinet	77	⊣ ,-					-			11.
Oxygen cylinders, 100 cub. ft. capac-	1	4	ł	+	4	4	1 1 1 1 1 1 1		-	•
- 1	12	1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	∞	າຕ	ro	_ თ	10		49
Oxygen cylinders, 150 cub. ft. capac-		٠	0							
Stick caustic soda in lbs.	972	500	102	580	298	100	200	550	712	4 514
Lump caustic soda in lbs.	2,800	3,060	132	2,820	1,384	1,100	2,730	1,850	2,500	18,376
Rectifier for re-charging electric	٥	٩	1		ro	-	က	 eo		28
lamps	1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1	-	1 1 1 1 1 1 1 1 1	 		-	1	2/1
Air generator for Gibbs apparatus Canvas tent 12x14	1	-	400			 		1		$\frac{400}{1}$
Charging racks for Edison electric	T	1	 	 	1	1		1		4
Spare rubber breathing bags		10		6	1	1	∞	чъ	12	
					,			•		

In addition, a sufficient supply of spare parts is kept at each car and station, so that repairs can be promptly made should any part of the apparatus become defective at any time.

The schedule of training at the stations and cars is as follows:

FIRST DAY.

Explanation of the apparatus by the Superintendent and demonstration with the pulmotor, lungmotor and inhalation apparatus, compression pump and animal air tester.

SECOND DAY.

Each member of the crew takes apart and assembles the apparatus, repeating the same until all are fully familiar with each part. Each member of the team demonstrates the application of the pulmotor, lungmotor and inhalation apparatus.

THIRD DAY.

Each member of the team wears the apparatus for two hours in fresh air while walking a distance of one mile.

FOURTH DAY.

Each member of the team wears the apparatus one hour in fresh air and one hour in smoke room in a vitiated atmosphere, making five trips through a tunnel 35 feet in length by 18 inches in height by 24 inches in width.

FIFTH DAY.

The members of the team wear the apparatus for two hours in a vitiated atmosphere in the smoke room, and build a brick stopping 6 feet square.

SIXTH DAY.

The members of the team wear the apparatus for two hours in a vitiated atmosphere in the smoke room, and build a brick stopping 6 feet square, after which they make 10 trips through a tunnel and carry 1,000 lbs. of rock a distance of 30 feet.

SEVENTH DAY.

Team makes a trip underground, carrying a stretcher for a distance of two miles.

EIGHTH DAY.

The work done on the seventh day is repeated.

NINTH DAY.

The work done on the sixth day is repeated.

TENTH DAY.

The team wear the apparatus for two hours and transport a weight of 100 lbs. on a stretcher up an incline rising 1 in 7 and 1,000

yards in length, then proceed into a vitiated atmosphere in the smoke room and build a brick stopping 6 feet square with a regulator 24 inches square through which a man is carried on the stretcher.

At the finish of each period of training each member of the team is required to thoroughly clean the apparatus he has been using, and to re-charge the small cylinder and re-assemble the apparatus, leaving it ready for use.

The complete course lasts ten days of two hours each. The method of procedure in the past has been that six months after this course was concluded the person who had undergone training was required to present himself for another day's training, after which, if he was found to be satisfactory, a certificate was awarded to him.

Arrangements have now been made that in future examinations will be held at each car and station, during the months of March and April in each year, of all persons who have taken a course of instruction during the previous year, before certificates will be granted for efficiency in Mine Rescue Work.

Although there has been an excessive shortage of men caused by the high percentage of miners who have enlisted for overseas service, the training in connection with first aid and mine rescue work has been carried on satisfactorily. One hundred and eighty men have undergone training in mine rescue work and 131 men in first aid work during the year.

Classes for the purpose of giving instruction in first aid work have been taken advantage of at a large number of the mines, with the result that the students who attended these classes have been successful in obtaining first aid certificates for 1st, 2nd and 3rd year from the St. John's Ambulance Association.

Arrangements have been made whereby two teams are selected from the trained men at each mine and each member of the team is required to take at least three hours' training during each month, for which he is paid 50c per hour. This payment is made by the Provincial Government, on receipt of a time-sheet from the superintendent of each car and station.

The teams are composed of five men each, one of whom is appointed captain. These arrangements were put into effect on the 1st of November, 1916, and are giving satisfaction.

Before any person is allowed to commence training in the use of the mine rescue apparatus, he is required to undergo a very strict medical examination.

In addition to the apparatus provided at the stations and cars the following mines have installed resuscitation devices:

Name of Mine	Pult	notor	Lungmotor
	Туре А	Type B	
West Canadian Collieries, Ltd., Bellevue	2		1
International Coal & Coke Co., Ltd	1		_
Hillcrest Collieries, Ltd			1
	3		2

The following table gives particulars as to the number of persons trained in first aid and mine rescue work at the different mines in the Province since this work was first organized, but does not include those who may have been trained elsewhere than in the Province:

		sons trained s to 1918		ons trained g 1918
Name of Mine	Mine Rescue	First Aid	Mine Rescue	First Aid
C. P. R. No. 6 Mine	107	93	10	20
C. P. R. No. 3 Mine	40	27	5	10
North American Collieries, Ltd., Coal-		1 -	1	
hurst	73	77	5	1
Chinook Coal Co., Ltd., Commerce	34	43	5	15
Rock Springs Coal & Brick Co., Ltd	15	10		
Canada West Coal Co., Ltd., Taber	40	40		10
West Canadian Collieries, Ltd., Blair-	1	1	1	
more	33	10	5	Í
West Canadian Collieries, Ltd., Belle-				
vue	68	30	1	l
McGillivray Creek Coal & Coke Co., Ltd.	30	40	5	5
Leitch Collieries, Ltd., Passburgh	10	10		
International Coal & Coke Co., Ltd	38	72		20
Hillcrest Collieries, Ltd.	27	5	5	31
Franco-Canadian Collieries, Ltd.	20	1 1		01
Burmis Coal Co., Ltd.	10	5		
Maple Leaf Coal Co., Ltd	5	5		
Brazeau Collieries, Ltd.	57	35	10	20
Canmore Coal Co., Ltd.	1	12	5	=0
C. P. R. Co., Bankhead	35	10	5	
Georgetown Collieries, Ltd.	13	10		
Jasper Park Collieries, Ltd	50	30	10	
Mountain Park Collieries, Ltd	1 30	50	10	
Western Commercial Co., Ltd.	10		5	
Rosedeer Coal Mining Co., Ltd	10		5	
Western Gem Mining Co., Ltd	10		10	
Rosedale Coal & Clay Products Co., Ltd.	5		10	
Drumheller Land Co., Ltd.	5		5	,
Premier Coal Co., Ltd.	5		5	
Star Coal Mines, Ltd.	5		5	
Alberta Block Coal Co., Ltd.	5		10	
Newcastle Coal Co., Ltd.	5		5	
Midland Collieries, Ltd	10		5	
North American Collieries, Ltd	5		5	
Sterling Coal Co., Ltd.	5		1	
Atlas Coal Co.			5	
Scranton Coal Co., Ltd.			5	
Peerless Coal Co., Ltd.			5	
Hamilton Coal Co.			5	
Excelsior Collieries, Ltd.			5	
Big Valley Collieries, Ltd.	5		5	
Dig variey Connectes, Ltd.				
	845	564	180	131

It will be noted from this table that 1,025 men have undergone training with mine rescue apparatus and 695 men in first aid work.

One call was made during the year for Mine Rescue Car No. 1 by the Franco-Canadian Collieries on April 3rd. The use of the mine rescue apparatus was not required.

During the year no accidents have occurred in connection with the training of mine rescue crews. The Proto apparatus has proved to be very satisfactory, and training at all stations and cars has been carried on very efficiently during the year.

All expenses and salaries in connection with the equipment and operation of the stations and cars are paid by the Provincial Government, the mine operators being assessed one-half of the cost at the end of each calendar year. This arrangement was put into effect when the mine rescue work was commenced in the Province, and is working satisfactorily.

The Canadian Mining Institute has installed, at each station and car, a branch library and provides the following publications: "Coal Age," "Colliery Engineer," "Science and Art of Mining," and "The Colliery Guardian," to which all mine employees and mining students have access.

The contest in first aid and mine rescue work was held at Lethbridge on July 1st, mine rescue teams taking part in the contest from the following mines in the Province: McGillivray Creek Coal and Coke Co., Ltd., Coleman; the International Coal & Coke Co., Ltd., Coleman; the North American Collieries, Ltd., Coalhurst; the C. P. R. No. 6 mine, Lethbridge; and the Drumheller Land Co., Drumheller. Teams taking part in the senior first aid contest were from Michel, Coleman, McGillivray, Commerce and Taber. Teams taking part in the junior first aid contest: Michel, Lethbridge, and Lethbridge Boy Scouts.

The successful contestants in the mine rescue competition were as follows: 1st, Drumheller Land Co., who were awarded the 1st prize and gold medals; 2nd, North American Collieries, Ltd., Coal hurst team, who were awarded 2nd prize with silver medals. The prizes in First Aid work were awarded as follows: 1st prize, with shield and gold medals, to the team from Michel, B.C.; 2nd prize with silver medals to the team from Coleman. The prizes in the Junior First Aid were awarded as follows: 1st prize with medals to team from Michel, B.C.; 2nd prize with watch fobs to team from Lethbridge.

	Total	and below	L 70 70 41 44	69
occurred		Total	□ 70 34 44 ; 50 50	28
ich they	ROUND	Slight	: 22 44 : 01	801
ld in wh	BELOW GROUND	Fatal Serious	- 01 · : : - 01	
TIC Fie		Fatal	::::::	1-
DOMES		Total	::~:	11
es in the	ABOVE GROUND	Slight	: := := : :	+
the min	ABOVE	Serious	::::=:	
ding to		Fatal	:::::-	c)
g 1919 classified accor	District	00170617	Clover Bar Edmonton Edmonton Edmonton Namao Cardiff Pembina	
range showing Accidents during 1919 classified according to the mines in the DOMESTIC Field in which they occurred:	Name of Onerator		Marcus Collieries, Ltd. P. J. McPeak City Collieries Edmonton Collieries, Ltd. Namao Collieries, Ltd. Cardiff Collieries, Ltd.	

NT	1	CERT.	Date
Name	Address	No.	Issued
Lennant, William G.	Lethbridge	403	10-4-18
Larair, Charles F	Drumheller	416	10-4-18
Lamb, Robson	Rosedale	448	10-4-18
Muir, David	Lovett	342	23-1-18
Moldowan, William	Pocahontas	349	15-2-18
Morgan William I	Coalspur	351	15-2-18
Mathewson, Archibald	Frank	362	14-3-18
Morris, David	Bellevue	382	14-3-18
Mossey, Thomas	Lethbridge	408	10-4-18
Marsh, William		423 424	10-4-18
March, James		437	10-4-18 10-4-18
Milligan, Robert		447	10-4-18
McAulay, Daniel	Pocahontas	350	15-2-18
MacKinnon, Hugh G.	'Canmore	354	11-3-18
McAndrews, John	Blairmore	355	11-3-18
McKinnon, Alex. D.	Coleman	376	14-3-18
MacDonald, John H.	Nordegg	397	20-3-18
McQueen, George	Nordegg	398	20-3-18
McDonald, George	Drumheller	417	10-4-18
McKenzie, John			10-4-18
McAskill, Donald McMillan, Daniel	Drumheller	439	10-4-18 10-4-18
McGladrie, Andrew	Lethbridge	411	10-4-18
	1	111	10-1-10
North, Walter J.	Blairmore	359	11-3-18
Oakley, John	Mountain Park	393	20-3-18
		ĺ	
Prentice, John G.	Frank	364	14-3-18
Pelpian, Mike	Commerce	365	14-3-18
Petrunia, John Andrew	Leinbridge		10-4-18
Powell, Albert E	wayne	427	10-4-18
Randall, David	. Coleman	375	14-3-18
Robert, Louis P.	Bellevue	399	20-3-18
Roberts, George	Taber	404	10-4-18
Riddoch, Thomas			10-4-18
Roberts, David O.		428	10-4-18
Redpath, James			10-4-18
Reid, Edward	Drumneller	440	10-4-13
Shaw, William	- Calgary	353	7-3-18
Sono, Christopher			11-3-18
Siminick, Alex.	Commerce	366	14-3-13
Sihom, William	Canmore	369	14-3-18
Stirling, James	Nordegg	391	20-3-18
Smith, Thomas Edwin	Coalhurst	405	10-4-13
Sinclair, James	Drumheller	444	10-4-18
Thidyma, John	Pocahontas	347	15-2-18
Tisdale, James R.	Nordegg	387	20-3-13
Thomas, Joseph D.	Aerial	433	10-4-18
Talot, William	Drumheller	446	10-4-19
Williams, Louis A	Pocahontas	344	15-2-18
Wilson, William G.	Nordegg	394	20-3-18
White, John Marvin	Lethbridge	410	10-4-13
Williamson, John	Wavne	425	10-4-13
Wheatcroft, Fred	Drumheller	432	10-4-13
Zuskar, Andrew	Stafford Village	367	14-3-18
	1		

ANALYSIS OF COAL.

Calorific	Value in Remarks B. T. U.		No. 1,			=	Main	10280 No. 1 entry.	=	10770 West entry.	10680 Main slope.		<u>.</u>	10210 Main entry.	10440 Main entry.	Main	13220 Main entry.	=	10130 Main entry.	==		9180 "C" entry.	_	=	8770 Main entry.	_	=	8880 Main entry.	8870 Main entry.	Moin
	Ash		14.14	16.90	17.46	11.19	11.34	10.40	7.90	7.93	9.50	_	9.30	7.72	8.69	14.10	10.32	7.34	0.08		16.67	9.71	7.19	7.61	9.13	7.39	6.97	9.36	5.73	000
Proximate Analysis	Fixed Carbon		58.42	57.25	52.93	41.29	41.07	41.65	42.40	47.43	50.59		46.60	45.54	45.39	57.48	59.86	47.43	45.53		54.28	42.23	42.34	42.26	38.23	41.00	40.57	40.78	41.90	02 96
Proximate	Vola- tile Matter		24.87	25.25	27.51	34.38	33.61	38.10	39.85	34.01	30.89		33.40	32.29	35.28	27.22	28.92	32.71	33.33		27.05	30.81	30.63	30.56	29.64	29.63	29.64	29.62	29.49	00 00
	Mois- ture		1.57	0.60	2.10	13.14	13.98	9.85	8.88	10.63	9.02		10.70	14.45	10.64	1.20	0.90	12.53	12.06		2.00	17.25	19.84	19.57	23.00	21.98	22.82	20.24	22.88	00 66
A CONTRACTOR OF THE CONTRACTOR	Address		Coleman	Bellevue	Bellevue	Taber	Taber	ILethbridge	Lethbridge.	Lethbridge.	Commerce		Elcan	Taber	Thelma	Hillcrest	Frank	Grassy Lake	Champion		Coleman	Drumbeller_	Drumheller-	Drumheller-	Beverly	Beverly	LtdBeverly	Beverly	Beverly	Tomonton
10.11	Name of mine from which sample was taken	McGillivray Creek Coal &	Coke Co., Ltd	Coll., Ltd	West Canadian Coll., Ltd	West Coal	٠.	\Box	Henderson & Shaw	C. P. R. No. 6 Mine	Chinook Coal Co., Ltd.	Rock Springs Coal & Brick	Co., Ltd.	Regal Collieries, Ltd	George Bragdich	Hillcrest Coll., Ltd.	Franco-Can. Coll., Ltd	Alfred Jackson	Henry Theriault	International Coal & Coke	Co., Ltd	Co., Ltd	Atlas Coal Co., Ltd.	Newcastle Coal Co., Ltd.	Humberstone Coal Co., Ltd	Humberstone Coal Co., Ltd	Humberstone Coal Co., Ltd	Humberstone Coal Co., Ltd		Canal Wast Assi As T+4
30 801.4	sample	Mine		Mine	Mine	Wine	Mine	Mire	Mine	Mine	Mine	Mine		Mine	Mine	Mine	Mine	Mine	Mine	Mine		Wine	Wine	Mine	Wine	Mine	Mine	Mine	Mine	B. 6.2
,	name or person taking sample	Wm. Stevenson		Wm. Stevenson			Moses Johnson		Moses Johnson	Moses Johnson	Johnson			Moses Johnson	Moses Johnson	Wm. Stevenson	Wm. Stevenson	Moses Johnson	Moses Johnson	Wm. Stevenson		D. McDonald	D. McDonald	D. McDonald	J. A. Richards	J. A. Richards	J. A. Richards	J. A. Richards	J. A. Richards	T A Dishards
Date on	sample was taken	22- 1-18	-	5- 2-18	6- 2-18	14- 2-18		26- 4-18				22- 5-18				29- 5-18				11- 6-18		25- 6-18			7- 7-18			7- 7-18	7- 7-18	11 7 10

ANALYSIS OF COAL.—Continued.

11:		I								_					-
	Remarks	Main entry.	Koom No. 3. North entry	Room No. 2.	N. E. Entry.	Main entry.	•	Main entry.	•	•	•	_	_	•	•
Calorific	Value in B. T. U.	0998	10865	9870	10190	9910	8710	9980	10330	9330	0896	9020	10750	9290	9100
	Ash	5.60	5.70	10.70	7.40	8.00	10.80	8.90	9.50	18.20	7.80	7.60	8.30	18.00	20.20
Proximate Analysis	Fixed	40.10	48.00	44.80	46.20	41.70	35.80	43.90	45.80	39.30	43.80	41.60	47.10	39.30	37.40
Proximat	Vola- tile Matter	29.70	37.60	31.30	31.30	34.40	31.10	33.20	34.10	30.70	32.50	31.00	33.90	28.70	27.70
	Mois- ture	24.60	8.70	13.20	15.10	15.90	22.30	14.00	10.90	11.80	15.90	19.80	10.70	14.00	14.70
	Address	Edmonton	Lethbridge.	Taber Taber	Taber	To Eyremore	Redcliff	Champion	Champion	Lethbridge	Drumheller	Drumpeller.	Lethbridge_	Tethbridge-	Lethbridge_
Name of mine from which	sample was taken	Great West Coal Co., Ltd Edmonton	[0, 1]	C. P. R. Mine Golden West, Coal Mining	Co., Ltd.	Frairie Coal Co., Ltd Redcliff Brick & Coal Co	Ltd	Ellis Bros.		John K. Hamilton	Western Geni Mining Co., Ltd. Drumheller	Fremier Coal Co., Ltd.	Wines	John K. Hamilton	Feueral Coals, Ltd. (No. 2) Lethbridge
Kind of	sample	Mine	i	Mine		Mine		P. 1	Wine	ine				ine	wine.
Name of person	taking sample	J. A. Richards	Moses Johnson	Moses Johnson	1	Moses Johnson M		Moses Johnson	Moses Johnson	D MoDerald	D. McDoneld	Moses Tohnson	Moses Johnson	Moses Johnson IN	MOSES JOHNSON
Date on which	was taken	11. 7.18			010	23- 8-18		29- 8-18	3-0-10	5- 0-18	5. 9.18	12. 9.18	90-11-18	90-11-10	01-11-07

The following table gives the names and numbers of the districts, along with the name and address of the District Inspector of Mines in charge of each:

No. of District	Name of District	Name and Address of District Inspector of Mines
1 2	Crow's Nest Pass. Pincher Creek.	James Crowder, Blairmore, Alberta. Telephone No. 70.
3 4 5 6 7 8 9 10 16	Lethbridge. Magrath. Milk River. Taber. Bow Island. Medicine Hat. Aldersyde. High River. Brooks.	Moses Johnson, 204 Sherlock Block, Lethbridge, Alberta Telephone No. 325.
13 14	Drumheller. Big Valley.	Duncan McDonald, Calgary, Alberta. Telephone No. M2140.
17 19 12 20 21 11 15	Hanna. Trochu. Banff. Three Hills. Carbon. Canmore. Brazeau.	William Shaw, Calgary, Alberta. Telephone No. M2140.
18 22 23 24 25 26 27 28 29 30 31 32 33	Lacombe. Battle River. Camrose. Tofield. Clover Bar. Edmonton. Namao. Cardiff. Wabamun. Pembina. Jasper Park. Yellowhead Pass. Mountain Park. Peace River.	Robert J. Lee. 10167 115th Street, Edmonton, Alberta. Telephone No. 82150

In addition to the above, Mr. James A. Richards, 11009 89th Ave., Edmonton, is acting in the capacity of General District Inspector of Mines. Telephone No. 3662.

LIST OF MINES.

The following table gives particulars of mines which have been opened in the Province:

H					1	:	,						Date of	-	
			jə		ĭ	Location	٦.			Character	ter		Aban-	Re B] [
	Operator.	Address.	Distri No.			νi	Ţ	괊	₹.	of coal.	-	Open- ing		Open- ing	ė !
-		Lothwidge	67			10	rc	-	ro	Domestic	! ! ! !	1905	1906	1	!
AID	Alberta Kaliway & Ifrigation Co	Lundhreck	1 07			23	-	03	70	Domestic	1	1906	1909	1	!
4 T	Alborta Coal Mining Co. 14d	Edmonton	28		E. 14	23	55	25	4	Domestic	1	1907		-	1
4	Alberta Coal Mine Co., Louisses	Lathbridge	က	v.	E. 1/4	16	10	21	4	Domestic	1	1910	1913	1	; 1
7 T	Authlia Coal Mills Co., Leanning Authlian & Lloyd	Bow Island	<u>-</u>		Ą	rœ	11	11	₩	Domestic	1 1	1911	1913	1	!
4 <	A bot W S	Kinnenville	ю		W. 1/4	-	ಣ	12	₹	Domestic		1913	1916		;
Ag	Ashmore Ismes	Reid Hill	6		E. 14	24	16	22	4	Domestic	1	1914	1915	1	ļ
A D	Anderson William John	Sheerness	17	ij	S. 1	12	29	13	4	Domestic	1	1914	-	1	;
A	Armour & Stauffer	Morrin	14		S. 2	28	31	21	4	Domestic	1	1915	1915	-	!
- T	Anne George	Morrin	14			22	31	21	4	Domestic	1	1915	1915	-	!
A I	Alberta Block Coal Co., Ltd.	Drumheller	13	z	W. 1/4	က	29	20	4	Domestic	1	1915	1		ļ i
Δr	Ardley Coal Co Ltd	Calgary	13	ن	S. 7	17	38	23	₩	Domestic	1	1916			ŀ
A	Alberta Penitentiary	Edmonton	26	River]	er Lot 20,		Edmonton	1 Set	tle-	Domestic	1	1915	-	-	1
				且	ment.								_		
Arı	Arndt. William	Boundary Creek	ıc	ŗ	S. 1	15	-	26	#	Domestic	1	1916	1	1	Į i
A	Annon, Dominic	Winnifred	2		S. 3	22	12	10	4	Domestic	1	1916	1 1 1	-	1
A+1		Drumheller	13	S.	E. 14	10	29	20	4	Domestic	1	1917	1		;
A	Ant Hill Coal Co Ltd The	Rowley	14		S. 4	13	32	21	4	Domestic	1	1917	-	1	[
ACI	Acme Coal Mining Co., Ltd., The	Wayne	13		S. 3	2	27	19	4	Domestic	1	1917		1	;
Au	Auchenback, Andrew	Thelma	20	ż	E. 1/4	12	2	က	4	Domestic	1	1917	1917	-	ŀ
Arc	Archibald. D.	Elcan	မ		8	4	10	17	4	Domestic		1917	1918	1	1
Ais	Alax Coal & Mining Co. Ltd.	Medicine Hat	∞	•		ro	13	9	-	Domestic	1	1918	1 1	1	;
Ā	Allen, E. D.	Rosalind	22		Е. ¼	18	43	11	₹'	Domestic	1	1918	1	i	1
Ę,	Banach & Hovnak	Stratheona	26		Near Edmonton South.	on Sou	ıth.			Domestic	 	1897	1899	i 1	;
۱ -	HIGH & ITO HOW	1	Ì						-				-	_	

LIST OF MINES—Continued.

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	P. P.	Open- ing						1		1			1	!	1 1 1 1 1 1 1			!	1918	1	!	! ! !	 - - - - -	
Date of	A han-	don- ment	1898	1900	1905		1908	1915	1913	1016	1	1913	1913	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1910	1913	1916	1	1914	1	1913	1 7	1918	1913
		Open- ing	1897	1897	1905	1902	1906	1907	1907	1907	1908	1908	1908	1909	1909	1910	1910	1910	1910	1910	1910	1910	1911	1911
	Character	of coal.	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Bituminons	Domestic	Domestic	Domestic	Domestic	Domestic	Domesite	Domestic	Domestic	Domestic	Domestic	Domestic	Bituminous	Domestic	Domestic
	-	××.			tle-	eil.	4	₩	4	ti FC	4	4	4	*	4 4	4	4	4	4	4	4	ro -	# 4	4
		귬	i	sham.	on Set	Gleichen	24	21	22	4 cc	22	22	22	53	7 1 1	18	17	25	12	16	16	12	67 16	8
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Tong	Location	7 2	Near St. Albert.	Sheep Creek near Lineham	River Lot 42, Edmonton Settle-	ment. Indian Reserve, S.	S. 10 28	W. 1/4 4	E. 1/4 25	17	E. 1/2 11	. 1/4		W. 4 15	11 23	10	11	S. 5 24	W. 1/4 32	S. 13 36	S. 41	V. 1/4 22	W. 1/4 3 E. 1/2 = 28	*
			Nea	She	Rive	Indi	ŗ		z.	-				vi vi	, ·	i		ij	٠.		i	z Z	ż v	
		risiO oM	27	10	22	16	20	6	01°	د	18	18	4	12.	- ¢	23	16	- 87	18	22	53	15	0 %	22
	Address.		St. Albert	Lineham	Beverly	Gleichen	Three Hills	Reid Hill	Bowville	Burmis	Nevis	Nevis	Magrath	Carbon	Taber	Bawlf	Eyremore	Cardiff	Britain		Hastings Coulee	Nordegg	Gadsby	Pincher Creek
•	Operator.		Bailey, Robert	Baldwin 1	Bush Mine Coal Co., The	Blackfoot Indians	Bothamley, C. F.	Bennett, Isaac	Bostock Charles	Burmis Coal Co.	Ben Nevis Mines, Ltd., The	Beaver Dam Coal Co	Bradshaw Mining Co	Blacklock, Alex.	Berford, Edward	Bawlf Collieries, Ltd., The	Baker, Hoge & Baker	Banner Coal Co.	Belcourt, Louis	Bish Bros. & Le Gear	Bish Bros. & Company	Big Chief Coal Mining Co. 144	Baines, Herbert	ning Co
•	οN	əniM	56	34	46	72	117	137	151	153	167	168	176	187	229	232	234	237	0.40	245	842	200	588 788 788 788	200

LIST OF MINES-Continued.

	Re-	Open- ing	
Date of	Aban-	don- ment	1912 1918 1918 1918 1918 1918 1918 1918
		Open- ing	1911 1911 1912 1912 1912 1913 1913 1914 1915 1915 1915 1916 1916 1916 1916 1916
	Character	of coal.	Domestic Bituminous Domestic Domestic Bituminous Domestic Domestic Domestic Bituminous Domestic
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	Location	vi .	74
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	jo	Distri No.	23 24 24 25 25 25 25 25 25 25 25 25 25 25 25 25
		Address.	Rosenroll Cochrane Medicine Hat Big Valley Diamond City Lucky Strike Lineham Calgary Lucky Strike Fineham Calgary Lucky Strike Fineham Calgary Lucky Strike Fineham Calgary Lucky Strike Prucher Creek Warner Hill Springs Princher Creek Drumheller Champion Lineham Hanna
		Operator.	Battle River Collieries, Ltd. Bonnie Brae Coal & Quarries, Ltd. Brown, Moses Big Valley Collieries, Ltd. British Collieries, Ltd. Bathurst Mining Co. Block Coal Collieries, Ltd. Black, William F. Consolidated with No. 433. Burns Coal Mines, Ltd. Bennie, James Scott Blue Diamond Coal Co., Ltd. Blue Diamond Coal Co., Ltd. Broke, E. F. Borthwick, Alexander Brooks, Edward Brooks, Edward Brooks, Edward Brooks, Burton Thomas Black Diamond, Oil Field, Ltd. Broks, Burton Thomas Black Diamond, Oil Field, Ltd. Brown, Charles E. Brown, Samuel H. Brown, Samuel H. Brown, Samuel H.
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LIST OF MINES—Continued.

	Re- Open- ing			1918
Date of	Aban- don- ment	1918		1899 1904 1907 1907 1909
7	Open- ing	1916 1917 1917 1917 1918 1918	1918 1918 1918 1918	1895 1895 1897 1897 1902 1902 1908 1908 1906 1906 1906
	Character of coal.	Domestic Dom	Domestic Domestic Bomestic Bituminous	Bítuminous Domestic Domestic Domestic Domestic Domestic Domestic Domestic Domestic Domestic Domestic Domestic Domestic Domestic Domestic Domestic Domestic
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Ę	i i	39 10 10 20 20 3 17	03 12 17 19	29 24 6 9 18 53 18 53 24 55 17 55 Hat. 8 55 19 26 2 9 31 9 19 29 7 10 Edmonton
Location	αi	21 118 110 27 33 32	1. 1. 1.4	29 6 118 118 124 17 19 19 19 19
Ţ	i	14 9 14 9 14 9 etween	2 74.	L. S. 13 6 S. W. 14 18 L. S. 1 18 L. S. 1 18 N. W. 14 17 Near Medicine Ha Near Okotoks. S. E. 14 8 L. S. 7 11 L. S. 7 11 Fraser Flats, Edm
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		zyririz Rokirir	្មាល់ក្	
1	Distric No.	18 6 2 2 1 1 2 2 2 2 3 2 3 3 3 3 3 3 3 3 3 3	7 16 11	11 3 3 2 5 2 2 2 2 2 3 2 3 2 3 2 3 2 3 2 3
	Address.	Gadsby	Bow Island Eyremore	Canmore- Lethbridge Edmonton Edmonton Cardiff St. Albert Nedicine Hat Okotoks Namao Bankhead Bankhead Taber Carbon Taber Taber Taber Taber
	Operator.	Bergren & Anderson Bragdich, George Brooks & King Bare, W. R. Blacklock, Dave Brisco, Frank Bow City Coal Co. Britannia Collieries, Ltd.		Canmore Coal Co, Ltd
.ol	A saiM	665 689 700 716 736 755 774	780 781 786	22 32 44 44 62 63 17 80 83 105 1132 1132

LIST OF MINES-Continued.

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Date of	Aban-	don- ment	1913	1910	1916	1913	1913	1913	1915	1916	1006	1912	1917	1918	1916	1915			1918		1 1	1917	2767	1918
		Open- ing	1909	1910	1910	1911	1911	1912	1913	1913	1004	1904	1914	1914	1915	1915	1915	1916	1916	1917	1917	1917	131	1918
	Character	of coal.	Bituminous	Bituminous	Domestic	Domestic	Domestic	Bituminous	Domestic	Domestic	Domestic	Domestic	Domestic	Anthracite	Domestic	Domestic	Domestic	Copper	Domestic	Bituminous	Domestic	Domestic	Bituminous	Domestic
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100	Adressa	Auui ess.	Spokane	Cochrane	Commerce	Frank	Cardston	Coalsmir	Namao	Gadsby	Edmonton	Edmonton	Namao	Wabamun	Morrin	Garden Plain	Donalda	Calgary	Peace Biver	Cadomin	Foreman	Erskine	Calgary	Drumheller
		Operator.	Carbon Hill Coal & Coke Co.		Ltd	,	e Co	J	Cameron Bros	Williams				Co., Ltd	Cooke W B	10		Co., Ltd	Coldman Earl		Cuming. E. E.	e	Christie Oil Co.	Colter, Evert Charles
1	on	Mine	206	230	247	092	316	321	3339	2000	597	93	420	424	458	492	609	629	634	603	704	089	722	726 732

LIST OF MINES-Continued.

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	Re- Open- ing			1	1	1 1	1	-		1	1	1 1		1 1	1	-	1	1	1	-		
Date of	Aban- don- ment	1918		1	1918	1910	1	1918	1909	1910	1914	1	1913	1914	1914	1914	1 1 1 1 1 1 1 1	1914	1 1	1916		1914
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	Address.	- Wayne Carbon	Lovett	Clover Bar	Taber	Grassy Lake	- Edmonton	- Alix	Taber	- Livingstone	- Medicine Hat	- Milk Kiver	Noble	- Big Valley	- Big Valley	- Big Valley	College	Pofield	Drumheller	Long View	- Lucky Strike	Raymond Pincher Creek
	Operator.	Chaley, Mike Conlin, John	Central Alberta Hard Coal Co		Domestic Coal Co.	Driggs, H. A.	Dawson Coal Co., Ltd.	Dweak, R. E.	Duncan, W. E.	Durrant, R. B.	Dennelly ford Coal Co., The	Dayis & Green	Davis, Thomas	Davidson, G. W.	Davison, R. T.	Consolidated With 290	Davis W M	Dobell Cosl Co of Toffeld Lid		Duell, Richards	Davies, Evan T.	Davis & Brown
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LIST OF MINES—Continued.

	Re-	Open- ing						!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	1918	1917
Date of	Aban-	don- ment	1915 1916 1916	1916	1918	1904	1898	1905	1911 1907 1913 1914	1913 1915 1916
_		Open- ing	1914 1915	1916 1916	1917 1918 1918	1916	1897 1901	1902	1902 1906 1907 1909 1909	1910 1911 1913 1913 1915
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	Character	of coal.	Domestic Domestic	Domestic Domestic	Domestic Domestic Domestic	Domestic Domestic	Domestic Domestic	Domestic	Domestic Domestic Domestic Domestic	Domestic Domestic Domestic Domestic
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					- 1 1					
	Address		Maycroft	Hastings Coulee . Milk RiverTaber	Beverly	GadsbyEdmonton	Edmonton	Edmonton	Okotoks Medicine Hat Elcan Grassy Lake Chamilon	Milk River Champion Three Hills Whitla
	,	Operator:	Dennis, Wilson Donaldson, Christopher S.		Ltd., The	Donaldson, Christopher SGadsby Davies, ElmerGadsby			es, Ltd.	

LIST OF MINES—Continued.

		ANI	NUAL REPORT, 1918	11.
	Re- Open- ing	1 1 1		
Date of	Aban- don- ment	1, 1	1918 1918 1918 1915 1917	1901 1898 1909 1906 1903
	Open- ing	1917 1917 1917	1900 1902 1908 1906 1911 1912 1915 1916 1916 1918 1918	1898 1896 1898 1901 1902 1906
	Character of coal.	Domestic Domestic	Bituminous —— Domestic —— Domestic —— Domestic —— Domestic —— Domestic —— Domestic —— Domestic —— Domestic —— Domestic —— Domestic —— Domestic —— Domestic —— Domestic —— Domestic —— Domestic —— Domestic —— Domestic ——	Domestic Domestic Domestic Domestic Domestic Domestic
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Location	S. S.	15 8 10 11 13 3	74 33 33 31 36 36 36 36 36 36 36 36 36 36 36 36 36	S. W. 14, 17 55 Sturgeon River, near St N. E. 14, 6 13 South of Pincher Creek. Near Edmonton South.
 		& & & & & & & & & & & & & & & & & & &		S. W. Sturg N. E. South
	District No.	133 6 11. L.	12 25 25 25 25 25 25 25 25 25 25 25 25 25	2522 2522 2522 2522 2522 2522 2522 252
	Address.	Edmonton South Drumheller	Frank Lethbridge Edmonton Clover Bar Bow Island Pleasant View Legal Elcan Halcourt Alix Ghost Pine Lethbridge Lethbridge Carmangay	Namao St. Albert High River Pincher Creek Bdmonton Bdmonton
	Operator.	Edmonton Collieries, Ltd Eno, John Enterprise Coal Company	Franco-Canadian Collieries, Ltd. Federal Coals, Ltd. (No. 1) Fraser-Mackay Collieries, Ltd. Consolidated with No. 90 Fortune, John Frotte, W. Ferguson, David Fringan, John K. Fringan, John K. Fringan, John K. Fringan, Ltd. Frinker, W. R. Frederal Coals, Ltd. Friser, Albert Fraser, Alec	Gibbard & Boutwell Gough & O'Neil Gillespie Bros. Great Northern Railway Gallagher & Hull Great West Coal Co., Ltd., The
	M əniM	699 701 702	48 54 90 90 93 33 33 33 33 34 50 60 60 60 60 60 60 60 71 73 77	867 89 89

LIST OF MINES—Continued.

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		Re-	Open- ing	1 1 ! 1 ! 1 !	1 1	!	1 1 1	! !		1 1	1915	1	1	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!		1	1				!	10	.1918	1 1 1	1	1	1
	Date of	Aban-	don- ment	1908	1917	1911	1914	1916	1911	1915	1914	1913	1912	1912	1914	1913	1 1 1 1 1	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	1	1014	1214	CIST	1916	1915	1918	1918)
	-		Open- ing	1903 1907	1907	1909	1909	1910	1911	1911	1911	1911	1911	1912	1912	1912	1913	1913	1010	1014	1314	1914	1915	1915	1915	1915)
		Character	of coal.	Domestic	Domestic	Domestic	Domestic	Bituminous	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	L'omestic	Demestic	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	
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		Address		Edmonton	Magrath	Pincher Creek	Medicine Hat	Canmore	Lucky Strike.	Edmonton	- Gadsby	Grassy Lake	Medicine Hat	Medicine Hat	Gainford	Black Diamond	Grassy Lake	Aerial	Groton	-Aerial	- Fishburn	- Swalwell	- Delia	Dowling Lake	Donalda	Trochu	- mantao
		Onerator		Great West Coal Co., Ltd., The	Gillespie, Francis	Good, Rola B.	Geddes, Day & Gibb	Georgetown Collieries 14d	Gorgenson, Sebb	Great West Coal Co., Ltd., The	:	Gibson, George	Ginther, F. M.	Gardner, R.	Gainford Collieries, Ltd.	Grant, John A.	Gibson, George S.	Consolidated with No. 436	Goodie, Philip	Great West Coal Co., Ltd.	Gilruth, James A	Gardner, Fred	Giamarino, N.	Giedd, Fred	Griffiths, Evan	Gordon, D. R.	rangilatii, Dayid re-re-re-re-re-
		.oV	Mine	99	162	184	200	211	278	283	289	294	297	536	352	359	377	378	421	436	458	459	478	487	603	623	2

LIST OF MINES—Continued.

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	Re- Open- ing	
Date of	Aban- don- ment	1917 1918 1918 1918 1918 1918 1918 1918
	Open- ing	1917 1917 1918 1918 1918 1918 1896 1899 1908 1909 1909 1910 1910 1911 1911
	Character of coal.	Domestic Dom
	R. W.	
	. Ei	25 9 13 4 11 29 20 4 14 48 18 4 32 27 18 4 30 42 12 4 30 48 18 4 Bdmonton Settle- 7 53 23 4 Edmonton Settle- 27 9 16 21 4 27 9 16 4 27 9 16 4 27 9 16 4 27 9 16 4 27 9 16 4 27 9 16 4 27 9 16 4 27 9 16 4 27 9 16 4 27 9 16 4 27 9 16 4 28 16 21 4 29 16 21 4 20 31 24 4 30 38 15 4 4 5 30 38 15 4 4 5 30 38 15 4 4 38 14 4 4 38 14 4 4 38 14 4
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	.oN	26 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
	Address.	Grassy Lake
-	Operator.	Gibson, Samuel Gillespie & Kirkland Goss Collieries, Ltd. Gouge, Jesse Gouge, Jesse Gouse, Jesse Humberstone, William Hullcrest Collieries, Ltd. Harper Coal Co. Harper Coal Co. Headerson Brothers Head Syndicate, Ltd. Helderson, Samuel Helderson, Samuel Helderson, John S. Halkirk Collieries, Ltd. Helderson, John S. Halkirk Collieries, Ltd. Halkirk Collieries, Ltd. Helderson, John S. Halkirk Collieries, Ltd. Halkirk Collieries, Ltd. Halkirk Collieries, Ltd.
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LIST OF MINES—Continued.

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N	Operator.	Address.			307	ation.			Ch.	racter		A han.	R.
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345	Henry, Charles F.	Bow Island	7	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	13	وح	; -	9	Domestic	tic	1912	1918	-
366		Grassy Lake	2	=	h of Grass	v [,a,]	, ake	2	Domesti	tic	1912	1913	1
373	Hedrich, William	Trochu	13	S S	77	1	33.5	7	4 Domesti	tic	1912	1913	! ! !
380	Halliday, George W.	Delia	17		-		30	2	4 Domesti	tic	1913	1918	1 1 1 1
417	Hallett, Thomas	Castor	18		14	26		4	4 Domesti	tic	1913		
426		Trochu	19	E	14	2	33	33	4 Domesti	tic	1914	1918	
427		Halkirk	18		7	81	39 1	9	4 Domestic	tic	1914		
437		Queenstown	6			33	7 81	71.	4 Domestic	tic	1914	1915	
7/5	Hildanl, Edwin	Morrin	14		7	38	31 2	7	4 Domestic	tic	1915	1917	
477	Halliday, George W.	Delia	17		3	82	30 1	2	1 Domestic	tic	1915	i -	! ! !
499	Hughes, Wm. R.	Etcan	9		2	4	10	7	Domestic	tic	1915	1	
638	Harrison, Stephen	Lethbridge	က		1/4	řõ	× ×	22	1 Domestic	tic	1916	1916	
674	Hannah, G. G.	Lethbridge	ണ		4	16	10 2	1,	4 Domesti	tic	1916	1918	
976	Henderson & Shaw	Lethbridge	က	٠.	12	7	9	<u>~</u>	4 Domesti	tic	1916		
694 000	Hodgson, Joseph		14		13			11	4 Domesti	tic	1917		
600	Hunter, John T	Garden Plain	12		16	36 3	33 1	14 4	4 Domesti	tic	- 1917	1917	1 1
200	Halbort Dowld	wayne	2		7			7 6:	4 Domesti	tic	1917	1	1 1
710	Halbert, William	Trochi	2 5	vi.	5, 12, 13,			12	Domesti	tic	- 1917	1918	1 1 1 1
730	Hetherington Frederick	Carmangay	2		76		33	3	1 Domesti	tic	1917	1	1 1 1 1
754	Hamilton W I,	Dinghos Capaly	۰۰		T3	98	14 2		1 Domestic	tic	1918	1918	1 1
759	Hannah G G	rincher Creek	40						Domestic	tic	- 1918	1918	
761	Lamman, G. G	Letabridge	70 0		2			, T	4 Domestic	tic	- 1918	1	
101	Lintohingon III	Lethbridge	, co	ızı ∟i.	4			22 4	4 Domestic	tic	1918	 - - - -	!
#0.L	Hutchinson, W	Beynon	133		2			7 0	4 Domestic	tic	1918	1918	
242	Holbort Dowid	Ferry Point	22			13 4	43 1	18 4	1 Domestic	tic	1918	 	
701	Harmond A	Sneerness	17	i Si	13	•		رة 4	f Domesti	tic	1918	1	1
1	11dy wood, A	Gadsby	18			7		9.	4 Domesti	tic	1918		

LIST OF MINES—Continued.

			ANNUAL REPORT, 1918	Li
	Re-	Open- ing		:
Date of	Aban-	don- ment	1910 1913 1913 1918 1918 1918 1915 1915 1916 1916 1916 1916	1
		Open- ing	1908 1906 1906 1907 1907 1911 1911 1911 1911 1911 1911	1918
	Character	of coal.	Bituminous —— Domestic —— Dome	Domestic
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	Address		Coleman Elcan Elcan Winnipeg Taber Drumheller Heatherbrae Halkirk Godshottas Godsby Bow Island Milk River Maycroft Delia Delia Garden Plain Donalda Pocasy Lake Grassy Lake Grassy Lake Grassy Lake Grassy Lake Drumheller	Kosebud
	Operator		Coal & Coke Co., Ltd as Coal Co., Ltd., The Land Dev. Co! C	Jay, G. D
٠,	οN	əniM	88 1111 1111 1118 1159 242 242 248 2407 4407 6679 6679 6679 6679	787

LIST OF MINES—Continuea.

)			THE MINES BRANCH	
		Re- Open- ing		
	Date of	Aban- don- ment	1913 1916 1916 1916 1916 1916 1918 1918	1915 1914 1913
		Open- ing	1898 1902 1906 1906 1906 1906 1911 1911 1911 1912 1913 1915 1916 1916 1916 1916 1916	1906 1907 1909 1909 1909
		Character of coal.	Domestic Domestic Dituminous Domestic Domestic Domestic Domestic Bituminous Bituminous Domestic Domestic Domestic Domestic Domestic Domestic Domestic Domestic Domestic Domestic Domestic Domestic Domestic Domestic Domestic Domestic Domestic	Bituminous Domestic Domestic Domestic Domestic
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		6 4	23 23 25 25 25 25 25 25 25 25 27 27 27 27 27 27 27 27 27 27 27 27 27	11 11 10 14
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	Location	Si Si	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	14 4 4 36
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		District No.	221 111 111 111 111 112 113 114 115 116 116 117 117 117 117 117 117 117 117	H 3 C 80 C C
		Address.	Carbon Carbon Carbon Carstairs Carstairs Carstairs Long View Edmonton Ghost Pine Greek Cremona Cremona Cremona Cremona Cremona Cremona Cremona Cremona Cremona Cremona Cremona Cremona Cremona Canalea Standard Carolla Caroll	Passburg Travers Bow Island Lethbridge Bow Island Fraserton
		Operator.	Knee Hill Coal Co., Ltd. Keith & Fulton Knowlton, G. H. Kummer, William Ketchum Coal Company Knee Hill Coal Co., Ltd. Knowlton, G. H. Kippen, Duncan Knowlton, G. H. Kusler, C. L. Kovaice, Frank Kerrison, T. W. Koffler, Mike Karison, T. W. Koffler, Mike Kaye, Herschel Klump, Dan Krozier, John Krozier, John Kreh, Johnson & Whitford Kurp, Br. C. Kurp, Br. C.	Leiton Collieries, Ltd., The Larson, Andrew Long, D. H. Lethbridge, City of Lindquist, A. A.
	.ol	Mine N	63 69 103 120 120 121 125 137 221 221 233 333 335 335 340 440 440 635 635 635	126 131 185 192 205 309

Annual Report, 1918

LIST OF MINES—Continued.

		Annual Report, 1918	117
	Re- Open- ing		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Date of	Aban- don- ment	1914 1918 1918 1918 1918 1918 1902 1904	1902
1	Open- ing	1911 1911 1912 1913 1913 1914 1915 1915 1917 1917 1917 1918 1918 1897	1901
	Character of coal.	Domestic Dom	4 Domestic
	Z Z	22 4 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	23 4
	T. B.	mton 8	3 23
Location	v 2	99 152 11 34 11 128 11 128 99 46 99 46 00 148 10 12 11 12 11 12 12 42 13 42 14 10 14 10 16	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		L. S. 5.—	ment.
	District No.	25 22 23 23 23 23 24 2 2 2 2 2 2 2 2 2 2 2	
	Address.	Wabamun Winnifred Pincher Creek Garden Plain Wabamun Trochu Halkirk Camrose Fround Hill Ponalda Winnifred Winnifred Winnifred Winnifred Strathcona Strathcona	Edmonton
	Operator.	Lake View Coal Co. Lavenne, Jules Lees, W. R. Lohrmann & Baxter Lavenne, Jules Lavenne, Jules Linder, Karl Lancaster & Willan Law, George Lindquist & Anderson Lux & Harrison Lavenne, Jules Lyon, H. E. Lyon, H. E. Lyon, H. E. Lindquist, Victor Lavenne, Jules Lindquist, Victor Lavenne, Jules Lindquist, Victor Lavenne, Jules Lindquist, Victor Lavenne, Jules Lindquist, Victor Lavenne, Jules Martin, Robert	Mays Coal Co.
	Mine No	319 324 3324 3324 400 419 419 423 423 423 423 423 423 423 423 423 423	25

LIST OF MINES—Continued.

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Date of	A han-	don- menț	1904	1913	1905	1910	1915	1908	1910	1909	1011	1101	1913	1913	1	1 1 1	1918	1915	1915	1918	1	1916	1917	1918	1917	1918
-		Open- ing	1902	1903	1905	1906	1907	1907	1907	1908	1908	1911	1911	1912	1912	1913	1914	1915	1915	1915	1915	1915	1915	1916	1916	1916
	Character	of coal.	Domestic	Domestic	Domestic	Domestic	Bituminous	Domestic	Domestic	Domestic	Domestic	Bituminous	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic
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	Τ.	F.	Edmonton	52	51	10	2	2	10	o	ء د	45	9	10	29	99	33	17	10	41	42	37	43	2	67	22
Location	34170	αi	Edm	2	20	4	16	19	4	23	က္လ	33.	16	က	တ	22	* #	15	6	32	28	24	×	22	2	28
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	Ad		Strathcona	Edmonton	nton	Elcan	Bellevue	Elcan	Elcan	Taber	Grassy Lake - Bow Island	Edmonton	Pincher Creek	Bow Island	Midlandvale	Ficture Butte	Botha	Eyremore	Grassy Lake	Donalda	Heisler	Stettler	Bawlf	Penadnt D'Oreille	Beazer	Drumheller
	Operator		Martin, E. DStrathcona	Milner & Shoeman Edmonton	Brothers Edmonton		Co., Ltd				Mills, Jonathan J Grassy Lake	Coal Co., Ltd.		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	es, Ltd	Molloy, Andrew Ficture Butte						ers		es	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Murray, John N.

LIST OF MINES—Continued.

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	Re-	Open- ing		1	1	1	1	i i i	1 1 1	1 1						1		1	1	1 1	1 1	1	 	1	1	1		1 1 1	11111
Date of	Aban-	don- ment		1	1915	1 1 1 1	1918	1918	1918	1	1	1	1918		1908	1		1	1911	1913	1918	1915	1	1 1	1914	1913	1913	1915	
		Open- ing	1917	1917	1914	1918	1918	1918	1918	1918	1918	1918	1899	1905	1906	1907		1909	1909	1910	1910	1910	1911	1911	1912	1912	1913	1913	1010
	Character	of coal.	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic		Bituminous	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	ameann
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	Address.		Long Coulee	Pincher Creek	Loveland	Delia	Huxley	Drumheller	Aerial	Drumheller	Pincher Creek	Forestburg	Black Diamond	Edmonton	High River	Tofield	•	Coleman	Lethbridge	Fincher Creek	•	Pincher Creek	Castor	Castor	- Suffield	- Lethbridge	Trochu	Fertility Magrath	
	Operator.	4	Munton, Evan	Murtland, R.	Martin, Louis	Miller & Iveson	Marx, G. W. D.	Miller, J. K.	Mitchell, Joseph F.	Manitoba Coal & Development Co	Mosley, Aaron	Martin, Sebastian	McPherson, A. D.	McPeak, P. J.	MacIntosh, C. G.	McDevitt, J. J.	McGillivray Creek Coal & Coke Co.,	Lttd.		McFarlane, William	McCormack, A. D.	McKinnon, A. D.	MacCormack, A. D.	McLean, Hugh D.	McAlister, Robert	McGuire, A. J.	McGuire, James S.	McCafferty, Thomas McIntvre. William H.	
	oN	Mine	685	715	447	725	727	752	992	775	179	185	30	49	119	149	204		212	777	246	253	275	304	334	343	385	398 405	-))

LIST OF MINES—Continued.

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		Re- Open- ing	10.00	
	Date of	Aban- don- ment	1913 1916 1916 1916 1918 1918 1918 1918 1918	-
		Open- ing	1913 1914 1914 1915 1916 1916 1917 1917 1918 1918 1918 1918 1918 1918	_
		Character of coal.	Bituminous Domestic Bituminous Domestic Domestic Domestic Domestic Domestic Domestic Domestic Domestic	-
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		District No.	102 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
		Address.	Crow's Nest Parr Fishburn Big Valley Wildunn Kippenville Erskine Champion Castor Pincher Creek Namao Coalhurst Edmonton Lethbridge Dodds Evansburg Comet St. Albert St. Albert Prochu Winnipeg Winnipeg Procholas Prochu Munson Winnipeg Firoth Firoth Firoth Frank	
The state of the s		Operator.	McGuire, A. J. McRae Bros. McPadden & Farnell McLean, Charles A. McAlpine, Alex. H. McAlpine, Alex. H. McDonald, William Consolidated with 275 Nam, Thomas North American Collieries, Ltd. North American Collieries, Ltd. North American Collieries, Ltd. North American Collieries, Ltd. North American Collieries, Ltd. North American Collieries, Ltd. North American Collieries, Ltd. North American Collieries, Ltd. North American Collieries, Ltd. North American Collieries, Ltd. North Alberta Coal Syndicate North Alberta Coal Syndicate North Alberta Coal Co., Ltd. North Alberta Coal Co., Ltd. North Alberta Coal Syndicate North Alberta Coal Syndicate North Alberta Coal Syndicate North Alberta Coal Syndicate North Alberta Coal Syndicate Northern Construction Co. Nash, Thomas Nelson & Johnson North Kootenay Pass Coal Co.	
	.0	Mine Vo	408 468 468 468 6612 6612 6644 7164 7174 1199 1199 2103 2203 2203 2203 2303 337 337 337 337 337 338	

LIST OF MINES-Continued.

		ANN	UAL REPORT, 131	.6
	Re- Open- ing			1918
Date of	Aban- don- ment	1915	1918	1917 1907 1913 1914 1913 1918 1913
	Open- ing	1913 1913 1914 1917	1899 1909 1904 1911 1916 1918 1918	1897 1907 1907 1907 1908 1910 1910 1911 1912
	Character of coal.	Domestic Domestic Domestic Domestic	Domestic Domestic Domestic Bituminous Bituminous Bituminous Bituminous Bomestic	Domestic Bituminous Domestic D
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	.oV	13 H 16 H 16 L	23 25 25 25 25 25 25 25 25 25 25 25 25 25	26 E.L. S. 21 L. S. 22 L. L. S. 21 L. S. 22 L. L. S. 23 L. L. S. 24 L. L. S. 25 L. S. 25 L. S
7	Address.	un	Medicine Hat Magrath Pincher Bar Pincher Creek Oliphant Mines Hanna Oliphant Mines	on Creek dge re re re liver ona
		Drumbeller Wabamun Hutton	Medicine Hat Magrath Clover Bar Pincher Creek Oliphant Mine Hanna Oliphant Mine Oliphant Mine	Edmonton Elcan Pincher Creek Lethbridge Prank Eyremore Coleman Milk River Milk River Carbon Carbon Strathcona Strathcona
	Operator.	North American Collieries, Ltd New Era Coal Co., Ltd Noble, W. G	Oliphant, John Oliver, Benjamin Ottewell, R. P. Owen, J. H. Oliphant-Munson Collieries, Ltd. Oliphant-Munson Collieries, Ltd.	Peerless Coal Co., Ltd. Patterson, Thomas Phincher Creek Coal Mining Co. Perry, James Consolidated with 226 (Frairie Coal Prairie Coal & Coke Co., Ltd. Prairie Coal Co., Ltd. Paulson, P. A. Peters, James Poxon, John Petrie, J. H. Peace River Collieries, Ltd.
·o.	Mine N	402 412 460 692	37 56 91 295 648 670 769	24 139 145 161 197 226 226 261 279 318 392

LIST OF MINES—Continued.

	Re- Open- ing		
Date of	Aban- don- ment	1913 1914 1916 1916 1916 1916 1916 1917	1907 1909 1906 1917
	Open- ing	1913 1913 1913 1914 1914 1915 1915 1916 1916 1916 1916 1916 1916	1897 1905 1901 1902 1902 1903
	Character of coal.	Bituminous Domestic D	Domestic Domestic Domestic Domestic Domestic Domestic Domestic Domestic
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:	District No.	222 222 222 222 222 222 222 222 222 22	26 25 27 27 27 27
	Address.	Burmis Magrath Raymond Berford Drumheller Calgary Donalda Carbon Parr Wayne Beazer Donalda Twining Verdant Valley Coalspur	Edmonton South Taber Edmonton Lethbridge Lethbridge Namao Taber
,	Operator.	Palmer Coal Co. Pyrah, Samuel Page & Dayton Popik, Dan Premier Coal Co, Ltd. Payre, Philip T. Pollitt, James B. Pleming & Regal Pattison, Charles H. Plerelss Coal Co. Perulzzo & Long Pickering, William H. Parge, Charles H. Parge, Charles H. Parge, Charles H. Parge, Charles H. Parge, Charles H. Parge, Charles H. Parge, Charles H. Parge, Charles H.	Radford, T. J. Reliance Coal Mining Co. Ransome, M. E. Rollingson, John Rech, Charles Regal Collieries, Ltd.
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LIST OF MINES—Continued.

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Open- ing	1904 1907	1907	1908	1908	1908	1908	1909	1910	1910	1911	1911	1912	1912	1019	1912	1912	1912	1913	1914
of coal.	Domestic	Domestic	Domestic	Bituminous	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Shale	Domestic	Domostic	Domestic	Domestic	Domestic	Snale	Domestic
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Distri No.	3 26	7 25	90	11	9	522	28 78	9	53	# o	18	00	2	65	13	<u>-</u>			
our cas.	Roya! View	Grassy Lake	Redcliff	Mitford Blean	Elcan	Edmonton		Taber	Round Hill	Gadahy	Castor	Redcliff	Winnifred	Rosedale	Wayne	Foremost	Long View	Edson	Lethbridge
10001000	Royal Collieries, LtdRosedale Coal Co	Raisbeck, Luke Runert's Land Coal Co	Redcliff Brick & Coal Co., Ltd.	Co., Ltd.		Raymond Coal Co.	Riviere Qui Barre Coal Co.	Regal Collieries, Ltd.	Round Hill Collieries, Ltd.	1		Ltd.	Olou Dundanota	ucts co.,	30., Ltd.		Rathburn, L. F. Badeliff Pressed Brick Co. 144		
			165		172					320		332	344		347	353			446
	A Denial Coal. Open- Aban- Contracted Aban-spiral Est Est W. Of coal. Open- don-don-don-don-don-don-don-don-don-don-	Edworter Edworter Edworter Edworter Pomestic 1904 1913 Edworter Pomestic 1907 1911 Edworter Pomestic 1907 1907 Edworter Pomestic 1907 Edworter Pomestic 1907 1907 Edworter Pomestic Contraction	Education Educ	Contraction Contraction	Contraction Contraction	Co. Ltd. Co. Ltd. Elcan El	Example Column Example Examp	Co. Ltd. Co. Ltd. Elcan Co. Ltd. Elcan Co. Ltd. Elcan Co. Ltd. Edmonton Co. Ltd. Edmonton Co. Ltd. Elcan Elcan Co. Ltd. Elcan S. T. R. M. Of coal. Open don-don-don-don-don-don-don-don-don-don-	Example Column Example Column Example Column Example Column Example Column Example Column Example Example Column Co	Edward E	Roya! View 3 S. E. 14 Domestic 1904 1913 Mitord 1915 Mitord 1916 Mitord 1916 Mitord 1917 Mitord 1917 Mitord 1918 Mitord Mi	Roya! View	Royal View	Royal View	Royal View	Roya! View 3 S. E. 14			

LIST OF MINES—Continued.

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οN	Onerator.	Address			Loca	ttion.				Character		A ban-	R.	
Mine			TisiU No.			νi	T. I	F.	Ä.Κ	of coal.	Open- ing		Open- ing	
465 465 469 479 479 608 667 7718 7720 7738 7738	Robinson, William Raisbeck, Luke Ross, R. A. Royal, Edward Consolidated with 325 (E. Wimmer) Riley, John W. Richmond, Andrew Ray, George Alex Read, Archer M. Rataushk, Fred Rudolph Brothers Robin Hood Coal Co. Rallingson, G. W. Raylingson, G. W. Raylingson, G. W. Raylingson, G. W. Raylingson, G. W.	Forestburg Grassy Lake Scollard Craigmyle Castor Lundbreck Erskine Halcourt Ghost Pine Creek Eragle Butte Edmonton South Aerial Beynon Beynon	22 4 1 1 2 2 2 3 4 5 1 1 2 3 5 5 1 1 1 1 2 5 5 1 1 1 1 1 1 1 1 1 1 1	A S S S S S S S S S S S S S S S S S S S	8 % % % % % % % % % % % % % % % % % % %	28 32 32 41 52 52 52 52 52 53 54 54 54 54 54 54 54 54 54 54	10 10 10 10 10 10 10 10 10 10 10 10 10 1	115 122 122 123 124 120 120 120 130 130 130 130 130 130 130 130 130 13		Domestic Dom	1915 1915 1915 1915 1916 1917 1918 1918 1918	1915 1917 1916 1916 1916 1917 1917		
765 794 794 794 794 701 101 110 1135 1135	Redcliff Brick & Coal Co., Ltd Redcliff Resh, Samuel F Etzik Stewart & Campbell Femcoal Strathcona Coal Co Fedmo Sturgeon Consoldated Collieries, Ltd. Edmo Sutherland, Murdoch Sutherland, Murdoch Rown Smith, T. Edwin Scott & Maclane Pinch Southern Alberta Coal Co., Ltd., The Taber Taber	Redeliff Etzikom Namao Redmonton South Medicine Hat Edmonton Namao Carmangay Pincher Creek Taber		S. E. S. E.	74 14 15	10 13 6 4 10 7 9 4 8 55 24 4 Edmonton Settle- 6 13 6 4 9 55 24 4 4 55 24 4 14 22 4 36 13 1 5 8 10 17 4	13 13 14 2 14 2 16 1 10 1 1 10 1	6 9 9 8 ettl 224 224 224 117 117 117 117		Domestic Domestic Domestic Domestic Domestic Domestic Domestic Domestic Domestic Domestic	1918 1918 1905 1905 1906 1906 1906	1913 1911 1911 1917 1914 1914		

LIST OF MINES—Continued.

.(1	Location						Date of	الم
M əni	Operator.	Address.	istrict No.				E E	M N		Character of coal.	Open-	Aban- don-	Re- Open-
M		u . ;	<u>п</u>					i			1116	memr	1118
163	Shirts, James E.	Taber	9	S. E.	14 30		10 16	4	Domestic	: : : :	1908	1911	
185	Rushton, F. L., Consolidated with 244 Camrose			ı					Domestic	c	1909	1913	
196	Speers H		2 7	ej E	1		ව දි දුරුදු		Domestic	C	1909	1911	1
202	Co., Ltd., The	Elcan		i≽	74 1 1/4 1	18 1	16	. 4	Domesti	: : :	1909	1914	1
238		Bow Island	~					4	Domestic	0	1910	1913	! ! ! !
239	W	Winnifred	7	αį	1 1			4	Domesti	0	1910	1917	
255	Straub, F. A.	Alix	61		1/4			3 4	Domesti	C	1910	1916	1917
747	Spicer Coal Co., Ltd., The	Dinant	25.0	*		18 4	48 1	4	Domesti	c	1910	1	
447	Scony Creek Conneries, Ltd.	Camrose	23		13	Ī		4	Domesti	c	1910		
247 0 1 0	Schares, J. M.	Heisler	51 ! 51 !		9 1			7	Domestic	c	1910	1916	1
007	Sinclair, A. C.	Rose Lynn	<u>-</u>					4	Domesti	c	1910	1911	1
202	Straub, F. A.	A ¹ 1x	<u>5.</u> [<u>.</u>	1/4 1		38 2;	*	Domestic	C	1910	1916	1917
707	Committe Ocal Minos Oc. 1+3	Shermess	7	oi p		19	9 12	41	Domestic	c	1910		1
264	Stavely Cost Mining Co.	wanamun	7. C	zi p	1/4 1/2			ري. د د	Domestic	c	1911	1913	
265	Simanton. W. H.	Withing Courses	ם מ	i s					Domestic	o	1911	1911	
268	Strader & Green	Halkirk	- 81	i ei	74 4 1/4 1	18 3	39 15	. 4	Domestic	o	1911	1916	
276	Slockett, George	Diamond City	ಣ	κi					Domestic	0	1911	1918	-
987	Square Deal Mercantile Co.	Big Valley	77		1	26 3	35 20	4	Domestic	C	1911	1913	
30.5	Sanderson, William John	Long Coulee	<u>ு</u>	Š	74			2	Domestic	C	1911	1913	
505	Santoni, Louis	Groton	ر ا	κi	1			Ŧ 1	Domestic	c	1911	1	1
955	Starton Course III	Kimball	٠		2010			4	Domestic	G	1911	1913	-
32.0	Sailshirm Bohent A	Munson			N 9	52.5	67.6	4,	Domestic	с	1912	1914	
36.0	Stoogtre Thomas	winning and an arrange	- 1	r i	7 2	·		4.	Domestic	c	1912		
370	Schmidt Stanban	Comrey	o t	٥	٥	44.0	N E		Domestic	C	1912	1915	1918
·		I naba	-	r i	e	>	_	4	Domestic	C	1912	1918	

LIST OF MINES—Continued.

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Mine ?	Operator.	.ggamag	intaid OM	<i>0</i> 2	S.	뗘	₩.M.	of coal.		Open- ing	don- ment	Open- ing
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770 784	Strong & Porter	AerialRose Lynn	17	1		13	н 4 1	Domestic		1918		

LIST OF MINES-Continued.

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	Be	Open- ing		!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!		!	 		1 1		1		1	1	1 1		1	1	1 1	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	
Date of	A han-	don- ment	1908	1 1 1	1913	1	-	1909			1181	1911	1913	1914	1918	0 1	1916	1016	0161	1918	1918
		Open- ing	1904	1902	1906	1906		$\frac{1907}{1907}$	1908	1	1910	1911	1911	1913	1914	1915	1915	1916	1918	1918	1915 1917
	Character	of coal.	Domestic	Domestic	Domestic	Domestic	organica	Domestic	Domestic	:	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic	Domestic
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		Distri oN				 02 6		47 CT							2 72				13		17 1
	Address		Namao	Lundbreck Mine	Three Hills	Three Hills		Tofield High River	Edmonton South	7.10	Tofield	Pincher Creek	Trochu	Windy Ridge	Hastings Coulee	Lousana	Ferry Point	Three fills	Alix	Aerial	Garden Plain
	Operator		Talbot, Mr.	Tonge, Thomas	Three Hills Coal & Dev. Co., Ltd	Trentham, Albert	Tofield Coal Co., Consolidated with	Thorne, John	Twin City Coal Co., Ltd	T T	Toffeld Coal Co Ltd	Tonge & Groton	Trochu Coal Co., The	Thorps, George W.	Toth. John	Thompson, Ole	Tate, John	Taff. John B.	Tredway Co., D.	Thomas, Joseph D.	Unsworth, Robert
	oN	Mine	16	104	112	113	150	160	177	5	929	313	322	382	443	495	616	652	731	745	488

LIST OF MINES—Continued.

		`.	THE MINES BRANCH
	Re- Open- ing		
Date of	Aban- don- ment	1918	1913 1915 1915 1915 1915 1918 1918 1918
-,-	Open- ing	1918 1912 1916	1903 1903 1903 1904 1906 1907 1909 1909 1909 1910 1911 1911 1911
	Character of coal.	Domestic Domestic	Bituminous Domestic Bituminous Lomestic Lomestic Domestic
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	District No.	34.3	2002 2002 2002 2002 2003 2003 2003 2003
	Address.	Lethbridge Prospy Grand Prairie	Blairmore Lundbreck Bellevue Leduc Three Hills Strathcona Three Hills Edmonton Milk River Bow Island Carbon Blairmore Champion Taber Castor Heisler Gadsby Three Hills Ardley Delia Briddis Britmore
	Operator.	Urwin, Wm. Vittario, Corraini	West Canadian Collieries, Ltd. Welsh, William West Canadian Collieries, Ltd. Wilson, John Watson, George Wetaskiwin Coal Co. Watson, George Wastern Coal, Ltd. Walker, Leo. J. Walwork, James Watson & Pattison West Canadian Collieries, Ltd. Watkins, Watkin E. Watkins, James M. Watkins, James M. Watkins, James M. Watkins, James M. Watkins, James M. Watkins, James M. Watkins, James M. Watkinson, Julius Watson, George Watson, George Watson, George Watson, George Watson, J. Woolings, Joseph West Canadian Collieries, Ltd.
٠.	Mine M	788 341 651	64 77 87 87 1102 1116 1122 1148 1186 1187 1187 1187 1187 1187 1187 118

LIST OF MINES—Continued.

			Annual Report, 1918	129
	<u>۾</u>	Open- ing		
Date of	A ban-	don- ment	1915 1915 1915 1918 1916 1918 1918 1918 1918	1916
		Open- ing	1913 1914 1914 1914 1914 1915 1916 1916 1917 1918 1918 1918 1918 1918	$1910 \\ 1911 \\ 1911$
	Character	of coal.	Domestic Dom	Bituminous Domestic Domestic
		××.	चिन्नचन्नच्याः चिम्नचन्नच्य स्ट	70 4 4
		꼂	21 24 24 24 25 21 11 11 11 12 20 25 25 25 25 25 25 25 25 25 27 27 27 27 27 27 27 27 27 27 27 27 27	22 22 23 23 23
	on.	Ŀ	28 29 29 29 29 29 29 29 29 29 29 29 29 29	49 34 34
<u> </u>	Location	œ	E. 14 E. 16 E.	W. 14 13 W. 14 10
	!	risiC oV	42222241	32 19 33 19 35
	Address.		Raymond	Coalspur
	Operator.		co., Ltd. g Co., Ltd. ingham	Yellowhead Coal Co Yard Brothers Coal Co Yard, George, C Yard, George, Z Zard, George, Zard, George, Zard, George, Zard, George, Zard, George, Zard, George, Zard, George, Zard, George, Zard, George, Zard, George, Zard, George, Zard, George, Zard, George, Zard, George, G
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LIST OF MINES—Continued.

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TATITIE	Operator.		Distri No.		3 2	S. T. R.	Fi :		×.	of coal.	Open- ing	Open- don- Cing ment	Open-
346 561	Young, Charles HYard Brothers Coal Co	Garden Plain Huxley	17	17 L. S. 19 L. S.	5. 1 1 5. 4 10		34 34	14 22	44	4 Domestic	1916 1916	1918	
383 403 311	Caswell, F. T., Consolidated with 403 Zarth & Embury Zehner, J. L.	Munson	13	n is S k	3 L. S. 7 22 7 S. W. 1/4 29		28 32]	13	ਚਚ	Domestic Domestic Domestic	1913 1913 1915	1916	

BOARD OF EXAMINERS.

The constitution of this Board during 1918 was as follows:

As representing:

- (a) The Mine Inspectorate:

 John T. Stirling, Chief Inspector of Mines.
- (b) Managers:
 Messrs. Robert Livingstone and William P. Williams.
- (c) Miners:
 Messrs. Evan Morgan and Andrew Goodwin.

Examinations were held during the year as follows:

For First and Second Class Certificates, on May 8, 9 and 10, 1918, at Blairmore, Lethbridge, Calgary, Edmonton, Nordegg and Mountain Park.

For Third Class Certificates, at Edmonton, on April 1, and April 9; Pocahontas, April 4; Mountain Park, April 6; Drumheller, April 16; Canmore, April 18; Taber, April 23; Lethbridge, April 24; Blairmore, March 22 and April 29; Nordegg, May 10; and Calgary, May 16.

For Mine Surveyors' Certificates, on May 19, at Blairmore, Lethbridge, Calgary, Edmonton and Nordegg.

Twenty-five candidates presented themselves for examination for First Class Certificates, of whom nine were successful; fifty-three for Second Class Certificates, of whom twenty-seven were successful; sixty-one for Third Class Certificates, of whom forty-seven were successful; and twelve for Mine Surveyors' Certificates, of whom seven were successful.

During the year, two hundred and twenty-three Provisional Certificates were issued authorizing the holders of these certificates to act as overmen until they had an opportunity of obtaining certificates by examination.

List of Names of Holders of First Class Certificatès issued by the Government of the Province of Alberta during 1918.

Name	Address	CERT. No.	DATE ISSUED
Bilson, G. H.	Beverly	27	28- 6-18
Brown, H. RBrown, R. J	Commerce Coal Creek	26 30	28- 6-18 3- 7-1 8
McDonald, N. M.	Bellevue	33	9- 7-18
Puckett, O. L.	Drumheller	29	3- 7-18
Quigley, D. H.	Coalhurst	28	28- 6-18
Ramsay, P. M.	Canmore	34	12-11-18
Smith, T. E	Coalhurst	31	3- 7-18
Watters, A. G.	Bankhead	32	5- 7-18

List of Names of Holders of Second Class Certificates issued by the Government of the Province of Alberta during 1918.

Blair, John		72 61	11- 7-18 5- 7-18
Bovio, MBrearley, G	Eyremore	78	23- 7-18
Crawford, JohnCrawford, W. S	Pocahontas Lethbridge	64 66	6- 7-18 9- 7-13
Fortner, E France, Thomas	Saunders Nordegg	57 67	3- 7-18 9- 7-18
Hargreaves, G.	Lethbridge	70 62	9- 7-18 5- 7-18
Hastings, A. PHulme, Charles	Nordegg	63	6- 7-18
Ironmonger, John	Hillcrest	60	5- 7-18
Jackson, John	Bellevue	56	3- 7-13
Joberg, A. F	Delia	68	9- 7-18
Johers, A. F. Jones, C. E. R.	Cardiff	83	12-11-18
Larrair, C. F.	Drumheller	74	12- 7-18
MacAskill, D.		77	16- 7-18
McKinnon, H. G.		76	13- 7-18
McKinnon, J. L.	Coleman	80	26- 7-18
McQueen, A.	Nordegg	71	9- 7-18
Nugent, Bernard	Taber	73	11- 7-18
Park, William	Bellevue	65	6- 7-18
Richards, Evan	Evansburgh	59	3- 7-18
Roberts, G.	Taber	79	23- 7-18
Sinclair, James	Drumheller	81	7- 7-18
Tennant, R.			3- 7-18
Tully, Thomas	Fernie, B. C.	75	12- 7-18
Worthington, T.	Lethbridge	69	9- 7-18

List of Names of Holders of Third Class Certificates issued by the Government of the Province of Alberta during 1918.

Name	Address	CERT. No.	DATE ISSUED
Armstrong, P. M.	Nordegg	224	8- 6-18
Bobrovski, M	Mt. Park	217	5- 6-18
Baird, William	Drumheller	218	5- 6-18
Brooks, Claude E.	Drumheller	220	8- 6-18
Campbell, G. P.	Nordegg	229	8- 6-18
Chapman, C.	Drumheller	232	12- 6-18
Collins, Sidney, G	Edmonton	219	5- 6-18
Dawes, Edmund	Drumheller	222	8- 6-18
Dunnigan, E	Bankhead	216	1- 6-18
Eno, John W.	Drumheller	223	8- 6-18
Gammie, J. S.	Drumheller	226	8- 6-18
Hartley. Thomas	Bankhead	227	8- 6-18
Head, James	Taber	209	1- 6-18
Hedges, R.	Beverly	239	29- 8-18
Hodgkinson, J. A.	Edmonton	205	1- 6-18
Hooks, J. W.	Calgary	210	1- 6-18
Hudyma, John	Pocahontas	207	1- 6-18
Jones, J. H.	Taber	214	1- 6-18
King, J. J. J	Nordegg	221	8- 6-18
Klejko, S.		213	1- 6-18
Lohmaier, P.	Sheerness	238	15- 7-18
Marsh, William	Drumheller	1 230	8- 6-18
Mathewson, J.	Nevis	236	22- 6-18
Mossey, Thomas	Lethbridge	237	5- 7-18
McDonald, G.	Drumheller	212	1- 6-18
Reid, Edward	Drumheller	206	1- 6-18
Reid, Samuel	Beverly	211	1- 6-18
Redpath, J.	Wayne	208	1- 6-18
Talbot, W.	Drumheller	235	22- 6-18
Tennant, W. G.	Lethbridge	228	8- 6-18
Thomason, C.	Michel, B. C.	234	14- 6-18
Tisdale, J. R.	Nordegg	231	8- 6-18
Watson, A. G.	Calgary	215	1- 6-18
Wheatcroft, F.	Drumheller	225	8- 6-18
White, J. M.	Lethbridge	233	14- 6-18

List of Names of Holders of Mine Surveyors' Certificates issued by the Government of the Province of Alberta during 1917 and 1918.

NAME	Address	CERT. No.	Date Issued
Brown, Thomas	Mountain Park	133	17-11-17
Cummings, Charles H	Brule Mines	135	3- 7-18
Gheur, Ernest	Nordegg	129	22- 2-17
Hamilton, Allan	Blairmore	131	7- 7-17
Johnson, Moses	Lethbridge	130	7- 7-17
Kidd, Gordon L. S.	Calgary	132	10-10-17
Lindoe, Luke	Bellevue	136	3- 7-18
McDonald, John R.	Frank	138	22- 2-17
Ritchie, David W Robinson, William E		134 139	28- 6-18 11- 7-18
Sherwin, Paul MSmith, Thomas ESmith, James H	Coalhurst	127 137 140	22- 1-17 3- 7-18 1- 8-18
Wright, Edwin	Bankhead	138	11- 7-18

WAGES.

The scale of wages paid in the Province at the end of the year 1918 was the same as that paid at the end of 1917.

The general wage schedule now being paid is as follows:

O T T F	OIDT		OTTO
OUT	SIDE) WA	GES.

OUTSIDE WINDS.	Per day	of	Hours
Bottom man	•	"	9
Slate pickers (boys)		"	ğ
Slate pickers (men)		"	9
Car oilers (men)		"	9
Car oilers (boys)		"	9
Tally boys			9
Teamsters		"	9.
Blacksmiths		"	9
Blacksmiths' helpers	3.67	"	9
Carpenters	4.72	"	9
Carpenters' helpers	3.67	"	9
Power house engineers	5.35	"	11
Power house engineers	4.77	"	9
Power house engineers	4.19	"	8 .
Fan men	9.01	"	11
Hoisting engineers	5.51	"	8
Hoisting engineers	4.00	"	9
Hoisting engineers	9.59		11
Incline engineers	4.13	"	9
Tail rope engineers	4.40	"	8
Tail rope engineers	4.64	"	9
Endless rope engineers	4.08		9
Box car loader engineer	4.19	"	9.
Tipple engineer	4.19	"	9
Screen engine tender	3.34	"	9 -
Locomotive engineer	4.19	"	9
Locomotive switchman	3.78	"	9
Fireman	5.00	"	8
Fireman	4.10	"	9
Fireman	4.14	"	11
Fireman's helper		"	9
Water tender	3.28	"	11 9
Railway car handler	3.66	"	9
Tipple dumper (man) Tipple dumpers' helpers	3.33	"	9
Tipple dumper (boy)	2.13	"	9
Top cagers	3.33	"	9
Car Repairer	4.19	"	9
Car repairer's helper	3.67	"	9
Breaker engineer	4.19	"	9
Lampman (depending upon number of lamps and			•
skill of man)\$3.16 to	3.66	"	8
Lampman (depending upon number of lamps and			
skill of man)\$3.16 to	4.19	"	11
Machinists\$4.19 to	4.72	"	9
Machinist's helper	3.67	"	9
Ashman	3.16	"	9
Ashman	3.66	"	11
Wiper (man)	3.66	"	11
Coupler (man)	3.16	"	9
Coupler (boy)	2.13	"	9
Breaker oiler	3.66	"	10
Washer or tipple oiler	3.66	"	10
Breaker picker boss	3.66	"	9
Timber farmer	4.19	"	9
Timber sawyer	3.33	"	9
Box car shoveller	3.66	"	9
Breaker platform boss	3.66	••	9

THE MINES BRANCH

Wages-Continued.			
			Hours
Breaker platform men	3.28	"	9
Breaker screen men	3.16	**	9
Rock bank men	3.16	**	9
Dirt bank men	3.16	"	9
Fan fireman	4.19	"	11
Stable men	3.16	"	9
Finisher after box car loader	3.16	"	9
All other labor not classified	3.16		9
BEE HIVE COKE OVENS			
Levelling and drawing (61/4-ton charge per oven)	1.50		
Levelling and drawing (5-ton charge per oven)	1.05		
Loading into box or open cars (over 20 tons per			
month) per ton	.23		
Loading into box or open cars (less than 200 tons			
per month) per ton	.21		
Steam locomotive engineer	4.19	**	9
Motorman	3.93	"	9
Lorryman	3.16	"	9
Plasterers	3.16	"	9.
Carters and cleaners	3.16	"	9
All other labor	3.16	**	9
BELGIAN COKE OVENS			
Ram engine man	4.19	"	9
Chargers	3.66	44	9
Clavers	3.66	"	9
Drawers	3.66	"	9
Loaders	3.28	"	9
BRIQUETTE PLANT			
Engineer	4.73		11
Briquetter	4.86		11
Briquetter's helper	4.19		11
Tar Melter	3.66		11
Laborers	3.66	"	11
INSIDE WAGES			
Shot lighter	4.08	**	8
Bratticeman	4.08	"	8
Bratticeman's helper	3.47	66	8
Timberman	4.08	**	8
Timberman's helper	3.47	"	8
Tracklayers	4.08	**	8
Tracklayer's helper	3.47	"	8
Motorman	3.79	"	8
· Locomotive engineer	3.79	"	8
Locomotive switchman	3.47	"	8
Drivers	3.79	"	8
Drivers (wet places)	4.08	**	8
Drivers (spike team	4.31	"	8
Couplers (men)	3.47	"	8
Couplers (boys)	2.13		8
Switch boys\$1.76 to	2.13	"	8
Door boys	1.42	"	8
Fan boys\$1.42 to	2.13	"	8
Rope riders	3.79	"	8
Main and tail rope riders	4.08	"	8
Pushers	3.47	"	8
Buckers	3.47	"	8
Loaders	3.47	"	8
Miners (wet places)	4.08	"	8
Miners' laborers (wet places)	$\frac{4.60}{3.88}$	16	8 ,
Rock miners	4.60	"	8
AND MARKET THE PROPERTY OF THE	7.00		3

WAGES-Continued. Per day of Hours 3.79 Timber handlers Cagers, slope and incline 3.47 Cagers, shaft 4.08 8 Machinemen _____ 4.60 8 8 Machinemen's helpers 4.08 8 3.47 3.97 8 4.08 3.47 Grippers _____ 3.47 Grippers (boys) _____\$2.13 to 3.47 Pick carriers _____\$1.76 to 3.47 8 3.47 8 Clutchmen _____ 4.08 3.47 All other labor not classified _____ 3.47

Note: From August 1st, 1917, 20 cents per day; from December 1st, 1917, 34 cents per day; from April 1st, 1918, 54 cents per day; from August 1st, 1918, 79 cents per day, and from December 1st, 1918, 92 cents per day were paid to all persons in addition to the rates mentioned above.

Your obedient servant,

JOHN T. STIRLING,

Chief Inspector of Mines.

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